FIG. 1

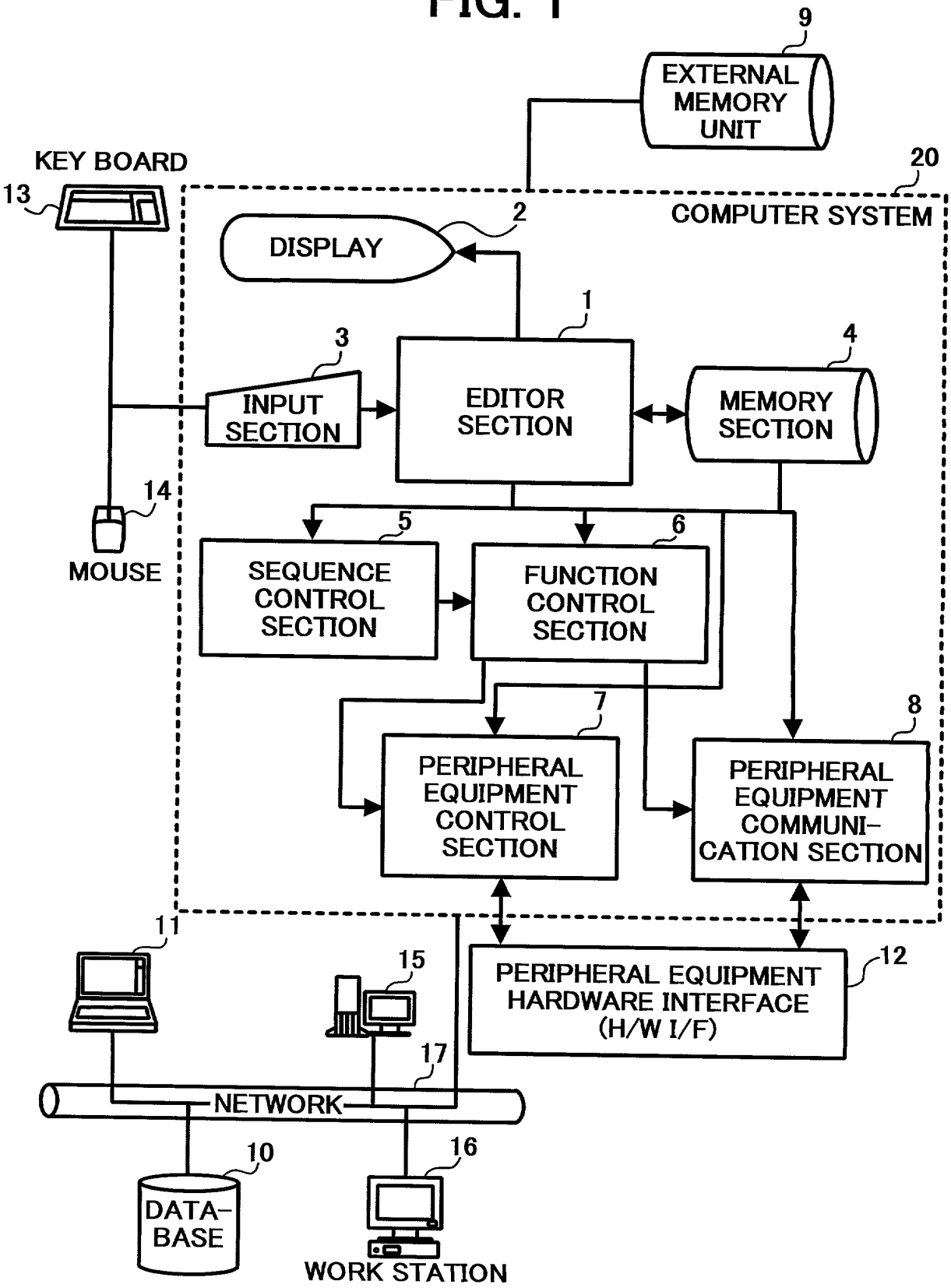

9
EXTERNAL MEMORY UNIT
KEY BOARD
13
20
COMPUTER SYSTEM
2
DISPLAY
1
3
4
INPUT SECTION
EDITOR SECTION
MEMORY SECTION
14
MOUSE
5
6
SEQUENCE CONTROL SECTION
FUNCTION CONTROL SECTION
7
8
PERIPHERAL EQUIPMENT CONTROL SECTION
PERIPHERAL EQUIPMENT COMMUNI-CATION SECTION
11
15
12
PERIPHERAL EQUIPMENT HARDWARE INTERFACE (H/W I/F)
17
NETWORK
10
16
DATA-BASE
WORK STATION

FIG. 2

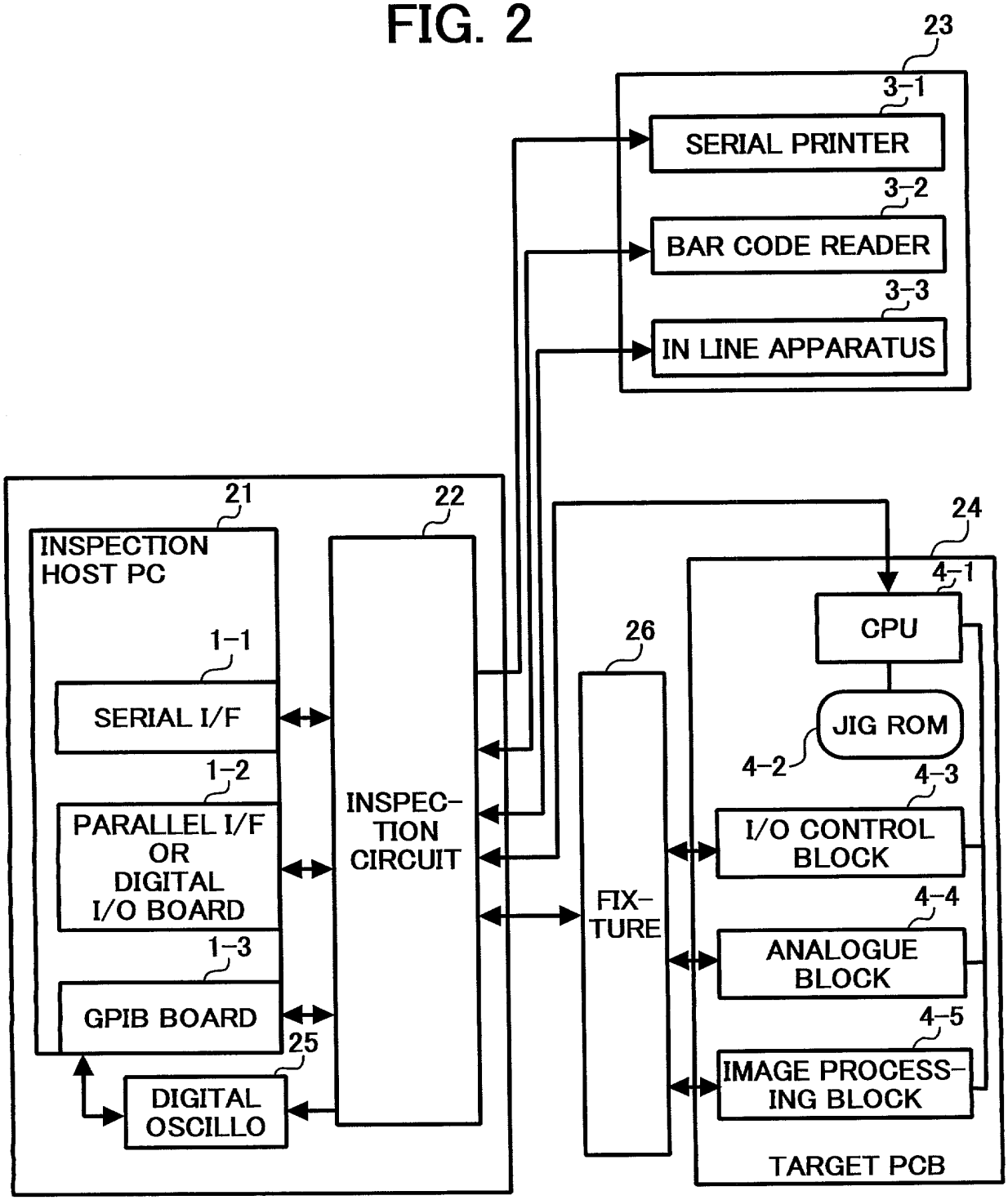

23
3-1
SERIAL PRINTER
3-2
BAR CODE READER
3-3
IN LINE APPARATUS
21
INSPECTION HOST PC
22
24
4-1
CPU
1-1
SERIAL I/F
26
JIG ROM
4-2
1-2
4-3
PARALLEL I/F OR DIGITAL I/O BOARD
INSPEC-TION CIRCUIT
I/O CONTROL BLOCK
FIX-TURE
4-4
1-3
ANALOGUE BLOCK
GPIB BOARD
4-5
25
IMAGE PROCESS-ING BLOCK
DIGITAL OSCILLO
TARGET PCB

FIG. 3A

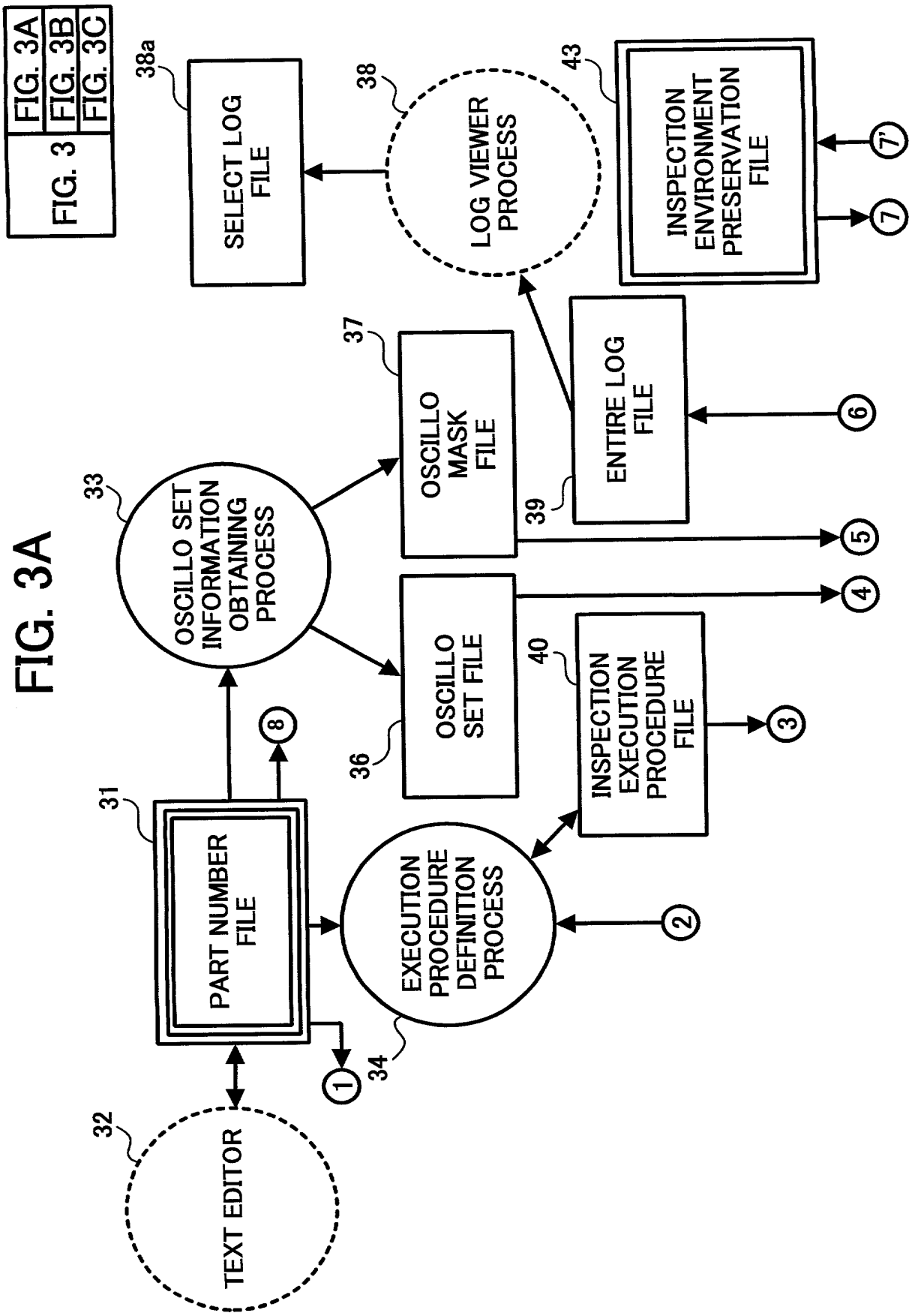


FIG. 3
FIG. 3A
FIG. 3B
FIG. 3C
38a
SELECT LOG FILE
38
LOG VIEWER PROCESS
43
INSPECTION ENVIRONMENT PRESERVATION FILE
7'
7
37
OSCILLO MASK FILE
ENTIRE LOG FILE
6
33
OSCILLO SET INFORMATION OBTAINING PROCESS
39
5
4
OSCILLO SET FILE
40
INSPECTION EXECUTION PROCEDURE FILE
3
36
8
31
PART NUMBER FILE
EXECUTION PROCEDURE DEFINITION PROCESS
2
1
34
32
TEXT EDITOR

FIG. 3B

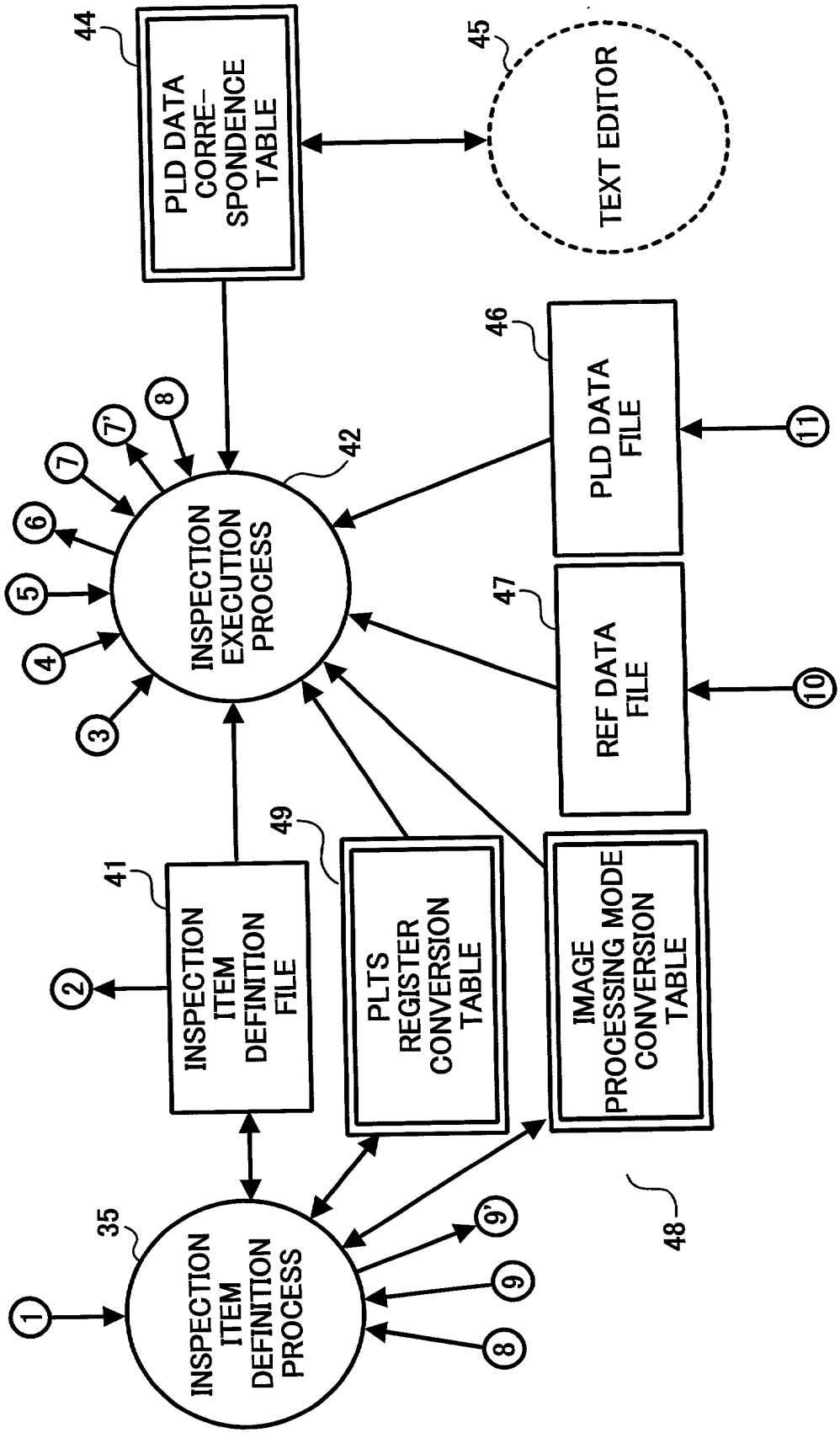

44
PLD DATA CORRE-SPONDENCE TABLE
45
TEXT EDITOR
46
PLD DATA FILE
42
INSPECTION EXECUTION PROCESS
47
REF DATA FILE
41
INSPECTION ITEM DEFINITION FILE
49
PLTS REGISTER CONVERSION TABLE
IMAGE PROCESSING MODE CONVERSION TABLE
48
35
INSPECTION ITEM DEFINITION PROCESS
1
2
3
4
5
6
7
7'
8
9
9'
10
11

FIG. 3C

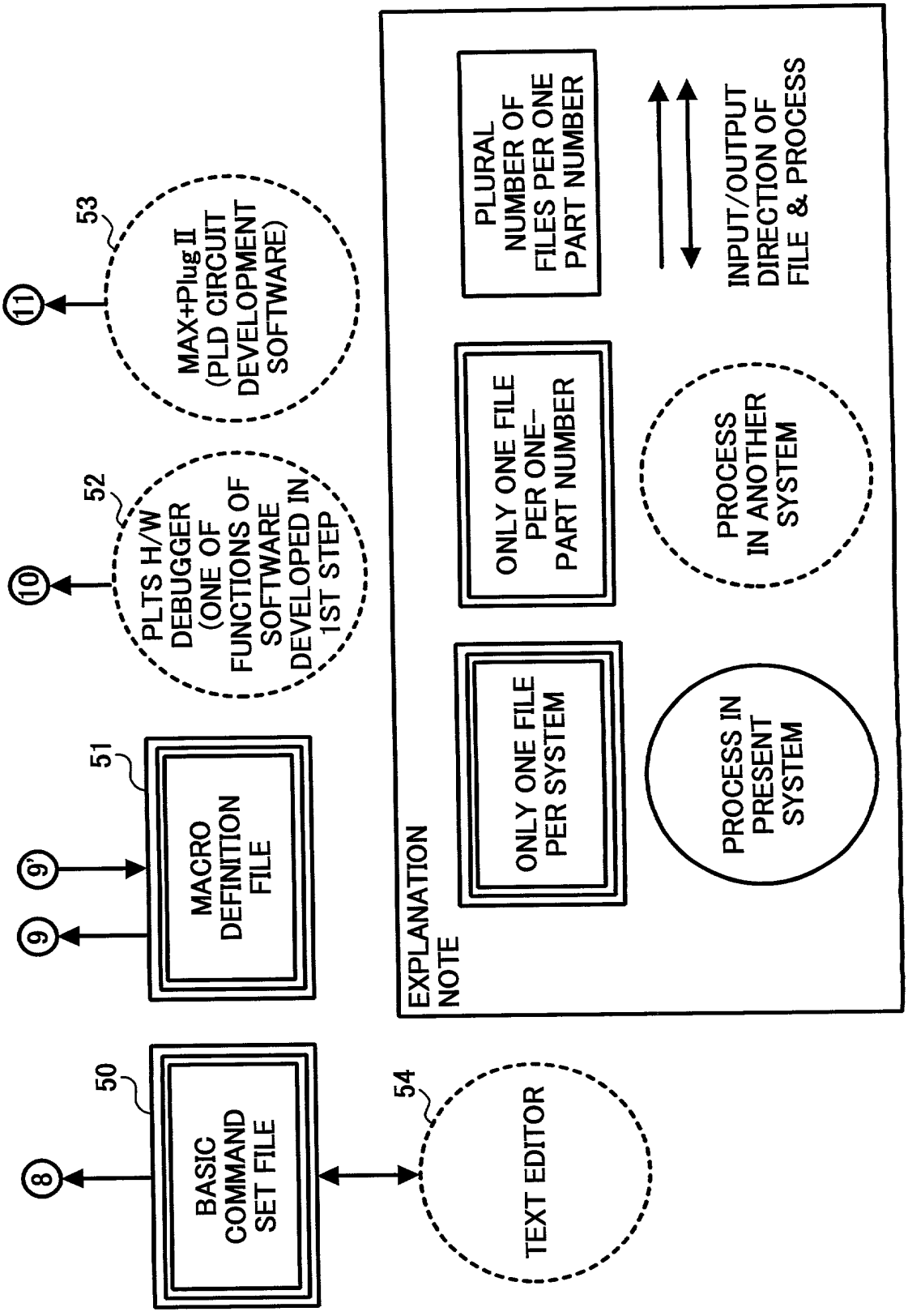

BASIC COMMAND SET FILE
50
8
MACRO DEFINITION FILE
51
9
9'
PLTS H/W DEBUGGER (ONE OF FUNCTIONS OF SOFTWARE DEVELOPED IN 1ST STEP
52
10
MAX+Plug II (PLD CIRCUIT DEVELOPMENT SOFTWARE)
53
11
TEXT EDITOR
54
EXPLANATION NOTE
ONLY ONE FILE PER SYSTEM
PROCESS IN PRESENT SYSTEM
ONLY ONE FILE PER ONE-PART NUMBER
PROCESS IN ANOTHER SYSTEM
PLURAL NUMBER OF FILES PER ONE PART NUMBER
INPUT/OUTPUT DIRECTION OF FILE & PROCESS

FIG. 4A

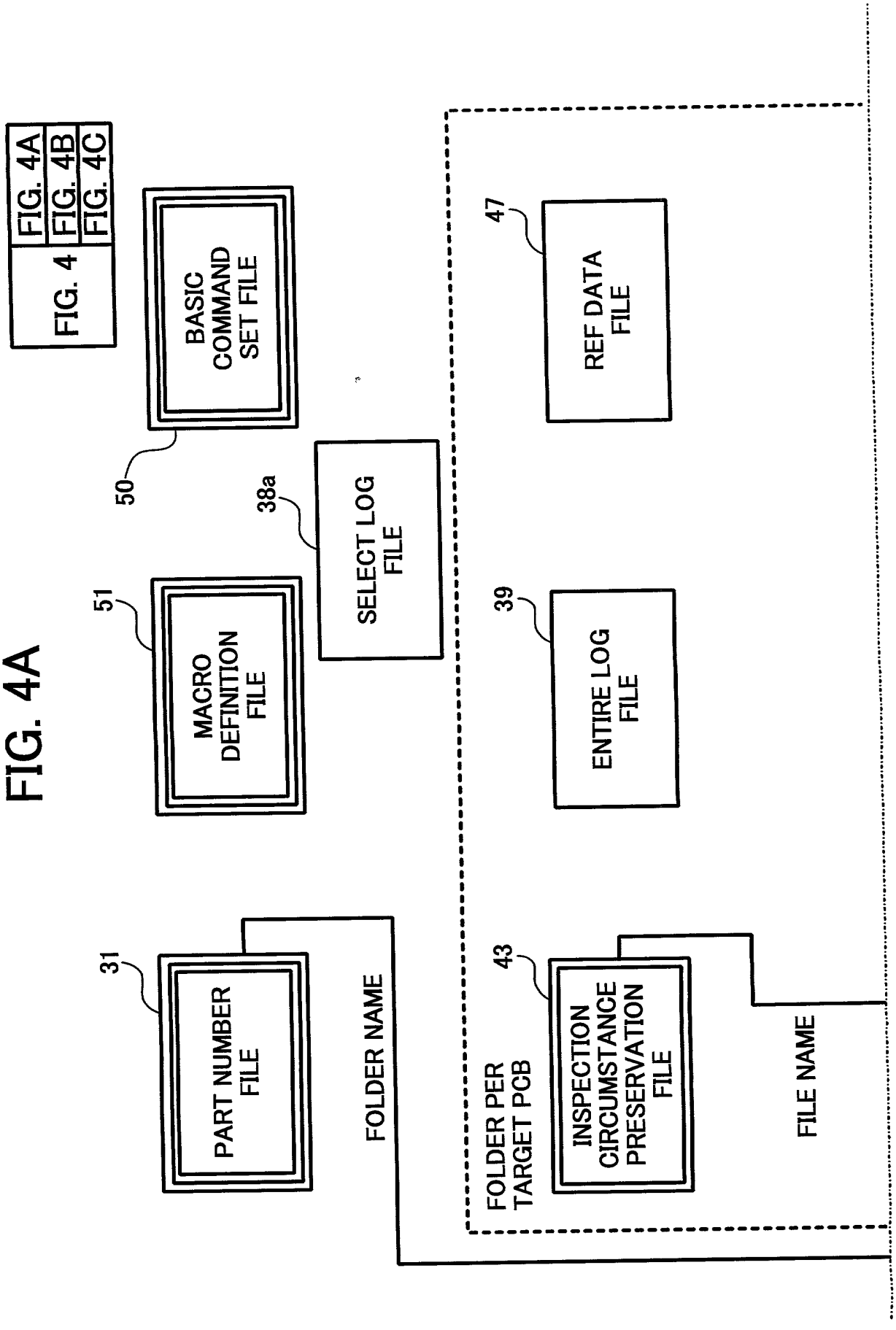


FIG. 4
FIG. 4A
FIG. 4B
FIG. 4C
BASIC COMMAND SET FILE
50
47
REF DATA FILE
38a
SELECT LOG FILE
51
MACRO DEFINITION FILE
39
ENTIRE LOG FILE
31
PART NUMBER FILE
FOLDER NAME
FOLDER PER TARGET PCB
43
INSPECTION CIRCUMSTANCE PRESERVATION FILE
FILE NAME

FIG. 4B

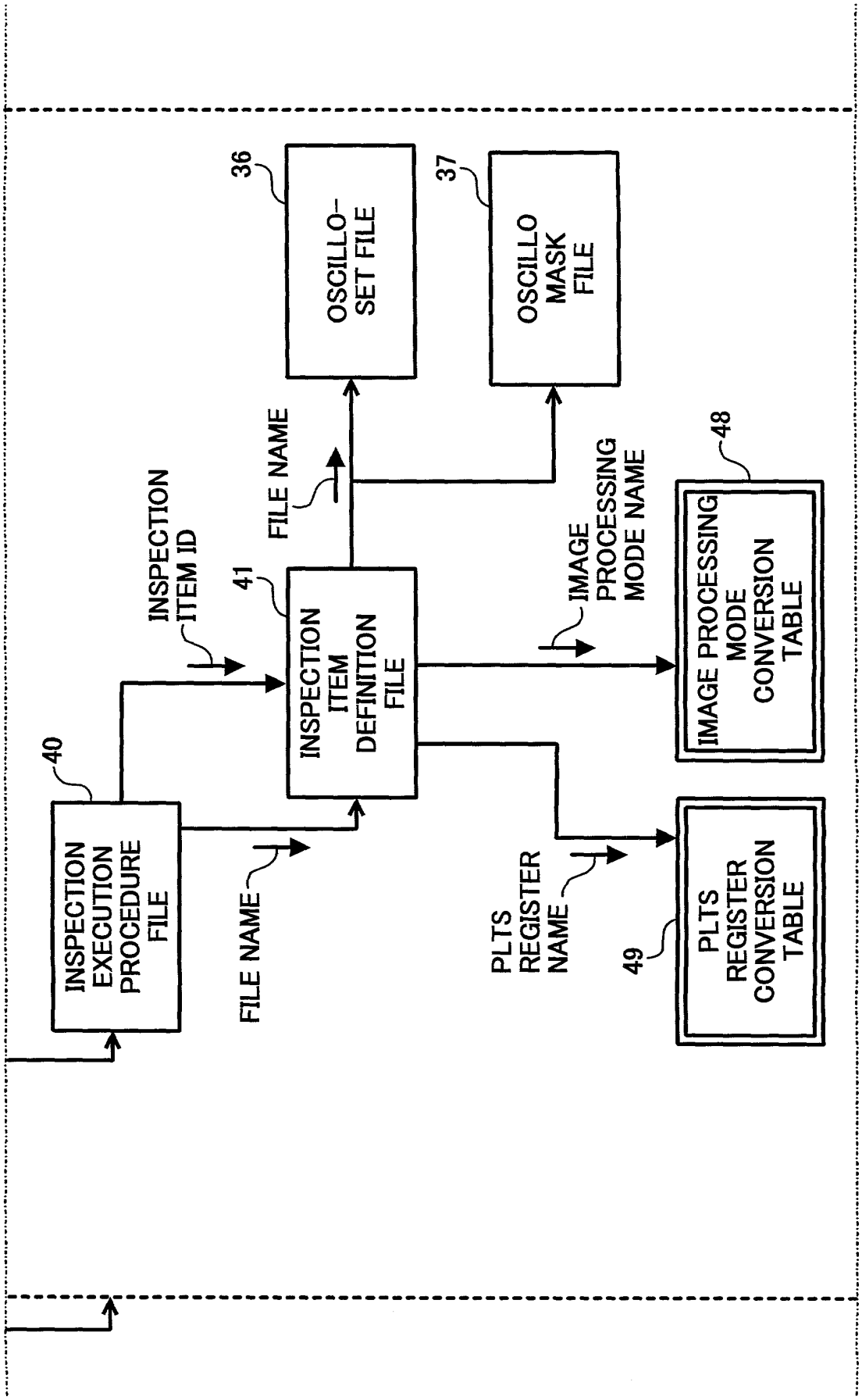

36
OSCILLO-SET FILE
37
OSCILLO MASK FILE
FILE NAME
INSPECTION ITEM ID
41
INSPECTION ITEM DEFINITION FILE
IMAGE PROCESSING MODE NAME
48
IMAGE PROCESSING MODE CONVERSION TABLE
40
INSPECTION EXECUTION PROCEDURE FILE
FILE NAME
PLTS REGISTER NAME
49
PLTS REGISTER CONVERSION TABLE

FIG. 4C

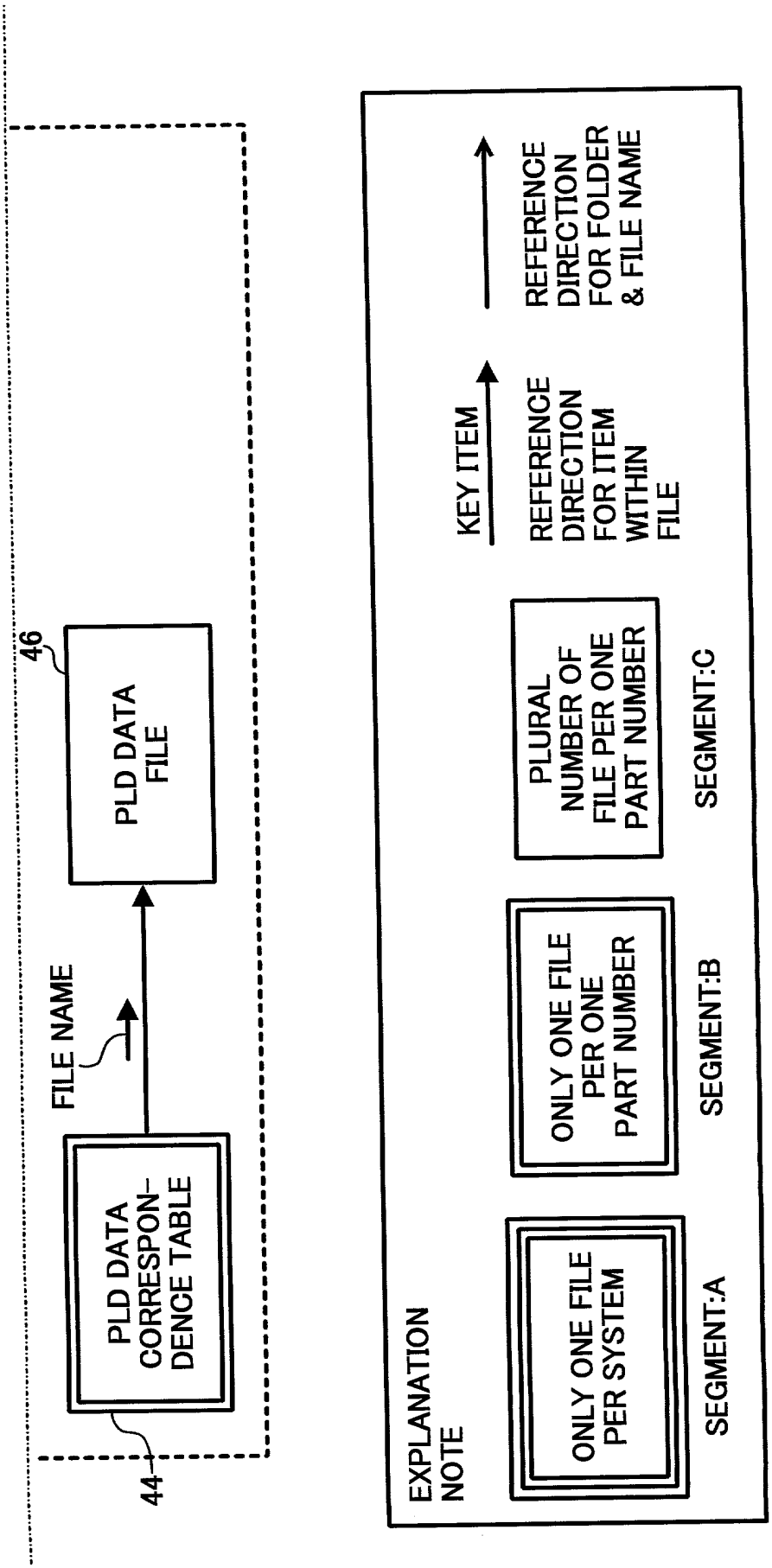
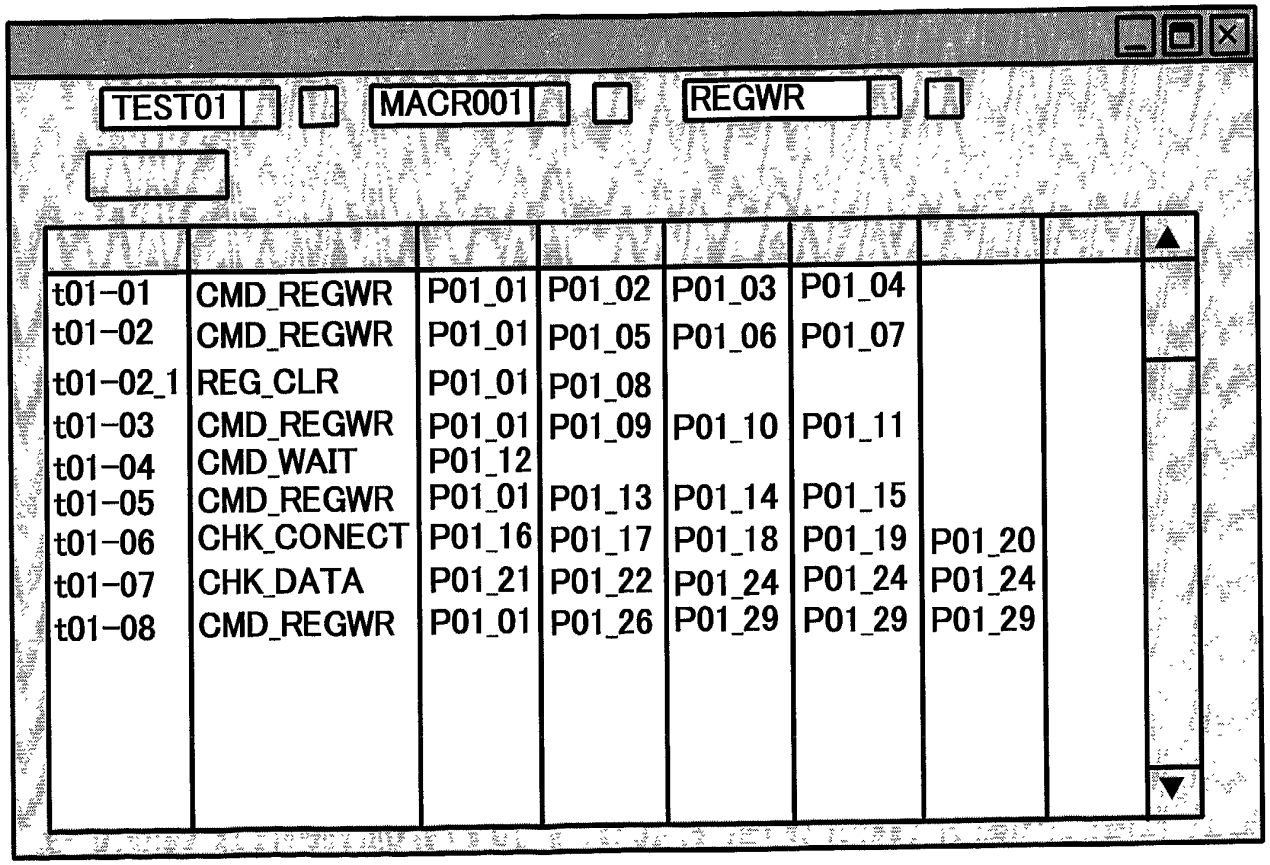
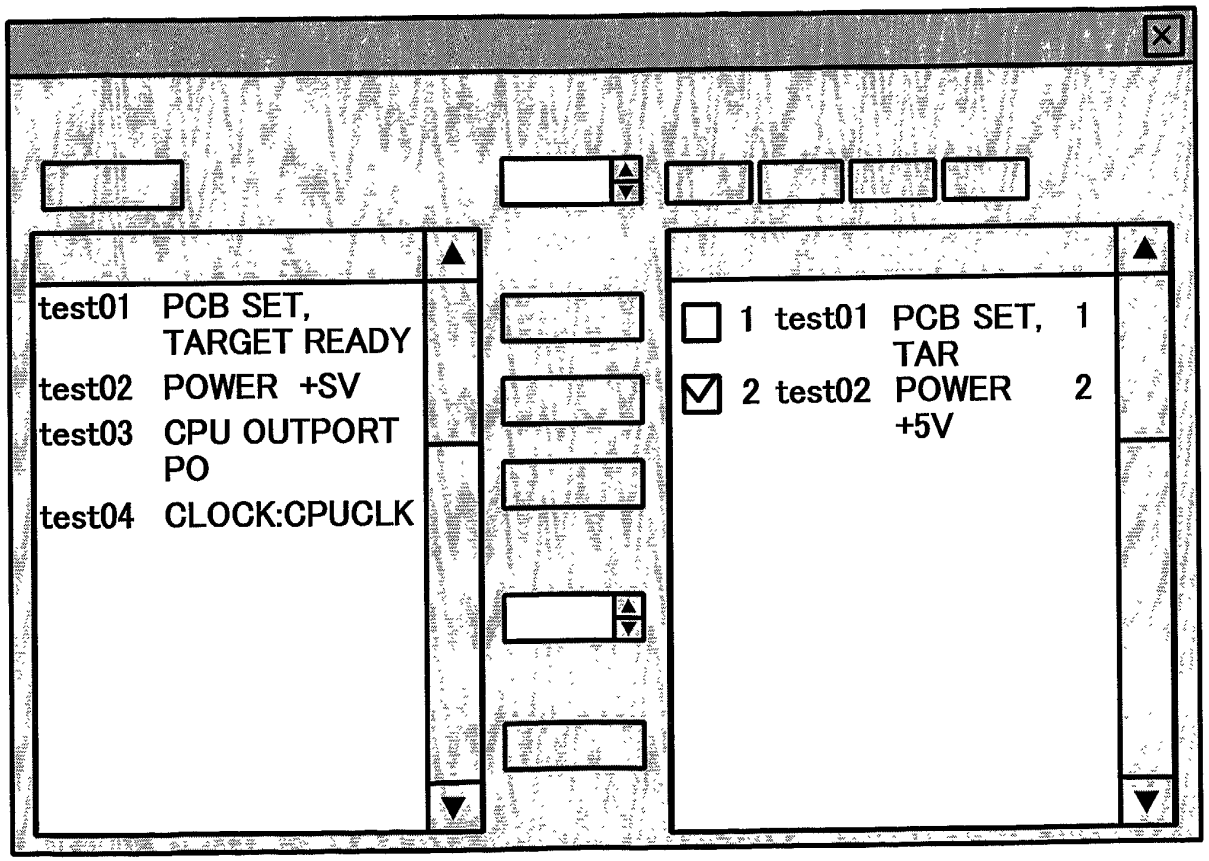

PLD DATA CORRESPON-DENCE TABLE
44
FILE NAME
46
PLD DATA FILE
EXPLANATION NOTE
ONLY ONE FILE PER SYSTEM
SEGMENT:A
ONLY ONE FILE PER ONE PART NUMBER
SEGMENT:B
PLURAL NUMBER OF FILE PER ONE PART NUMBER
SEGMENT:C
KEY ITEM
REFERENCE DIRECTION FOR ITEM WITHIN FILE
REFERENCE DIRECTION FOR FOLDER & FILE NAME

FIG. 5



EXAMPLE: EDITOR SECTION GUI ①

FIG. 6



EXAMPLE: EDITOR SECTION GUI ②

FIG. 7

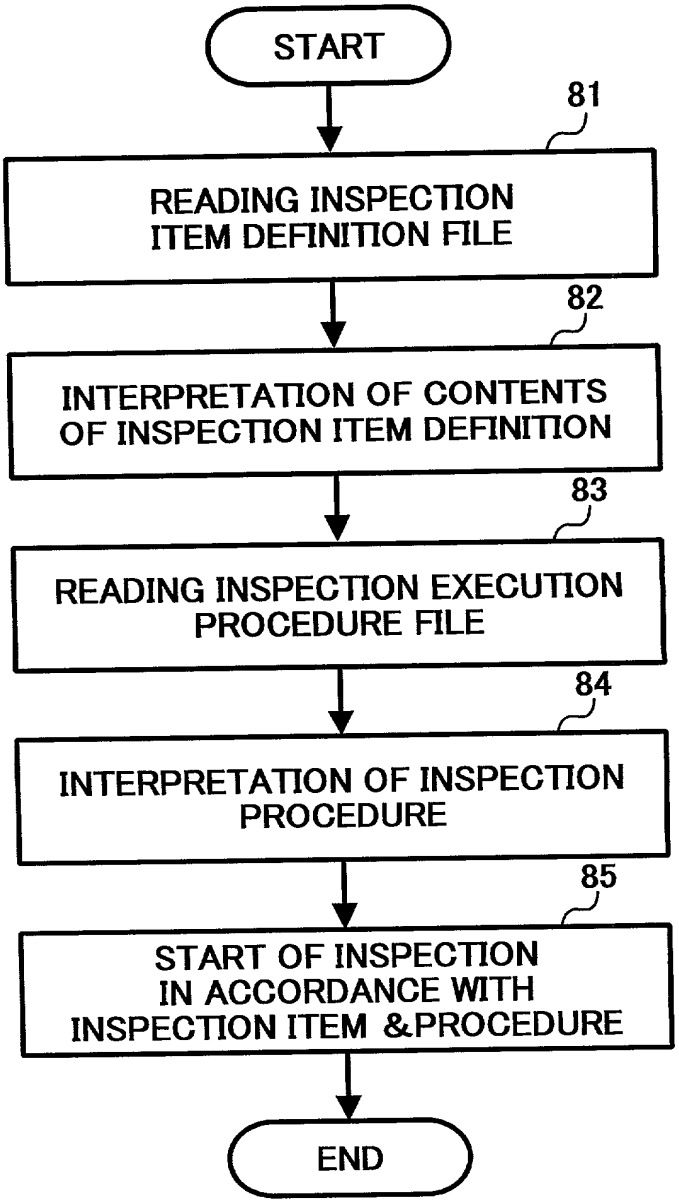

START
81
READING INSPECTION ITEM DEFINITION FILE
82
INTERPRETATION OF CONTENTS OF INSPECTION ITEM DEFINITION
83
READING INSPECTION EXECUTION PROCEDURE FILE
84
INTERPRETATION OF INSPECTION PROCEDURE
85
START OF INSPECTION IN ACCORDANCE WITH INSPECTION ITEM &PROCEDURE
END

FIG. 8

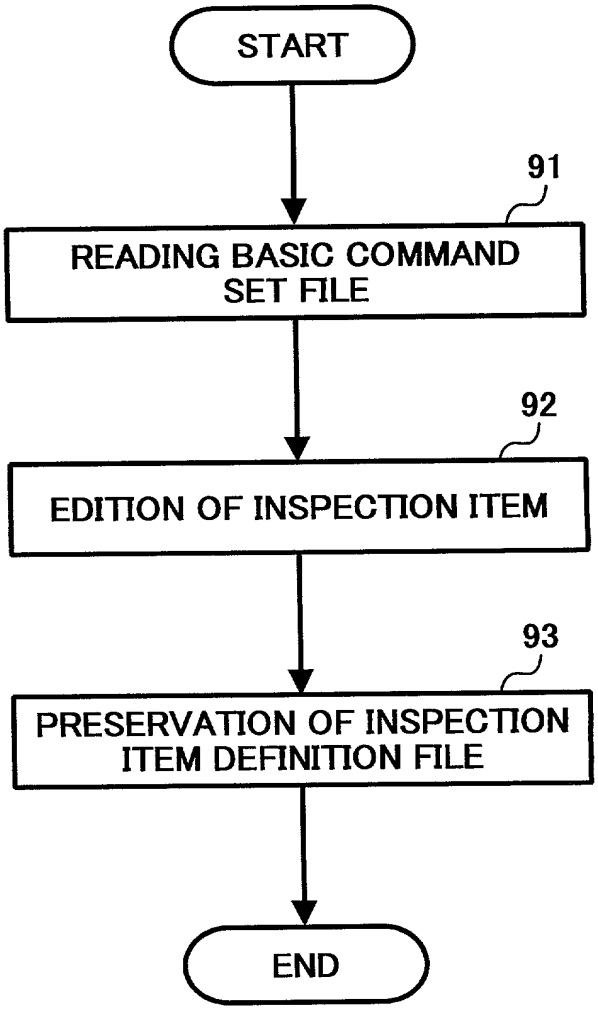

START
91
READING BASIC COMMAND SET FILE
92
EDITION OF INSPECTION ITEM
93
PRESERVATION OF INSPECTION ITEM DEFINITION FILE
END

FIG. 9

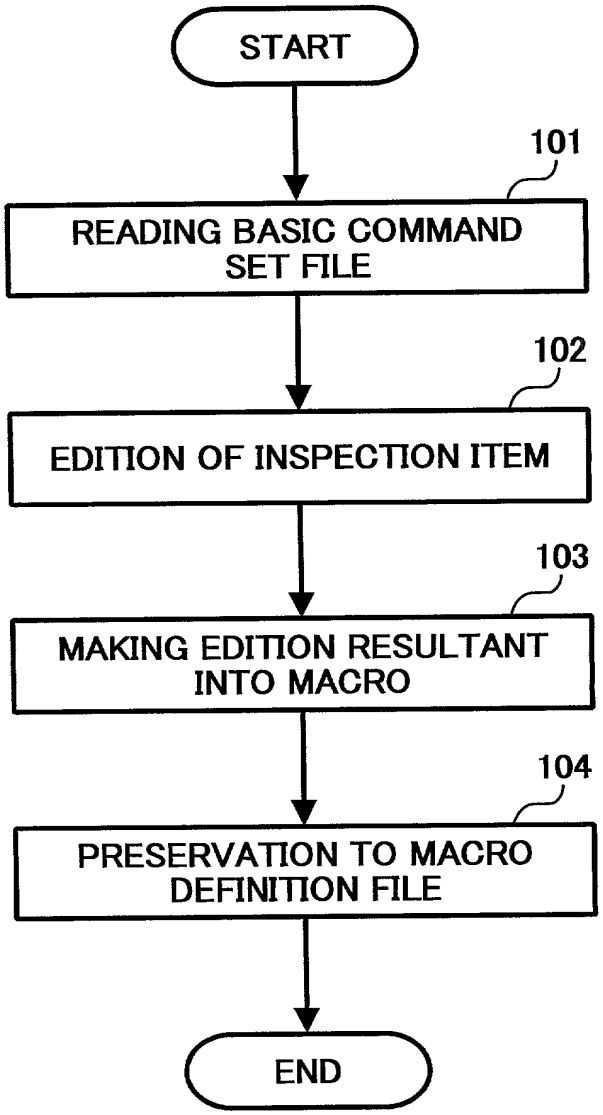
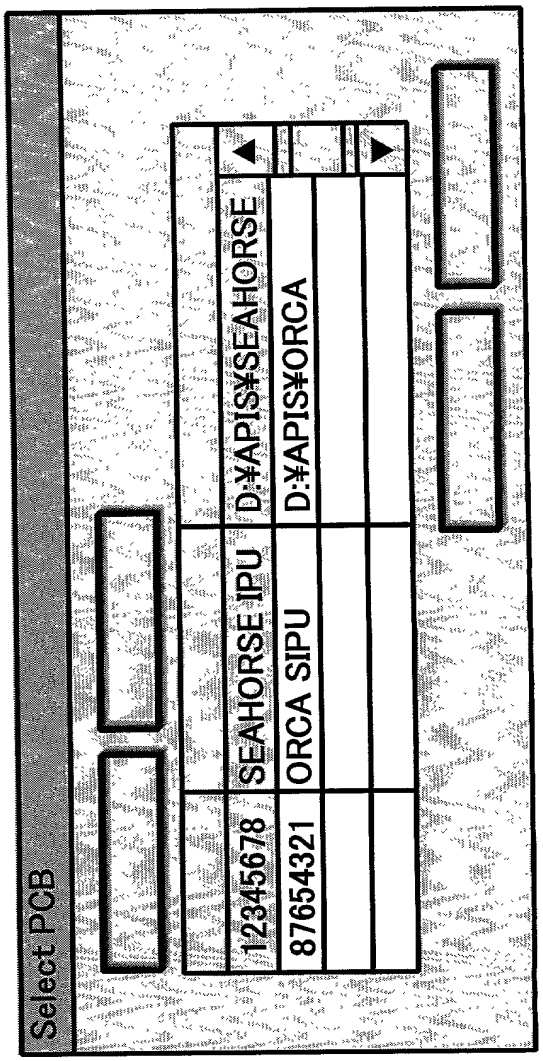

START
101
READING BASIC COMMAND SET FILE
102
EDITION OF INSPECTION ITEM
103
MAKING EDITION RESULTANT INTO MACRO
104
PRESERVATION TO MACRO DEFINITION FILE
END

FIG. 10



EXAMPLE: PART NUMBER SELECTION GUI

FIG. 11A

FIG. 11	
	FIG. 11A
	FIG. 11B
	FIG. 11C

	ITEM NAME	MODEL	BYTE NUMBER	REMARKS
HEADER SECTION				
	FILE ID	BYTE[]	23	"BASIC COMMAND SET@HANKS"
	SEGMENTATION CHARACTER	BYTE	1	0x02C(',')
	VERSION	BYTE[]	8	"V01.00"
	SEGMENTATION CHARACTER	BYTE[]	2	0x0D,0x0A
	COMMAND NUMBER	BYTE[]	3	001～999
	SEGMENTATION	BYTE[]	2	0x0D,0x0A
	SEGMENTATION	BYTE[]	2	0x0D,0x0A
	INTERMEDIATE TOTAL		41	
DATA SECTION				
	BASIC COMMAND			
	INTERMEDIATE TOTAL			
TOTAL				

EXAMPLE: BASIC COMMAND FILE FORMAT

FIG. 11B

BASIC COMMAND FORMAT

COMMAND	PARAMETER 1	PARAMETER 2	
COMMAND (A)	P1(B)	P2(B)	・・・

COMMANDS&PARAMETERS ARE COMPARTMENTALIZED BY [','] WHEN SEMI-COLON IS PUT AT BEGINNING, IT IS TREATED AS COMMENTS.

A:PARAMETER NUMBER INCLUDED IN COMMAND
B:PARAMETER INFORMATION FORMAT(b1:b2:b3:・・・)

b:1 PARAMETER TYPE

1:NUMERICAL VALUE	4:READ REGISTER NAME	7:INTERNAL TABLE REFERENCE
2:LETTER STRING	5:PROCESSING MODE NAME	8:OTHER SELECTION
3:WRITE REGISTER NAME	6:FILE NAME	9:ERROR MESSAGE

b:2 MINIMUM VALUE
* LETTER STRING NUMBER, WHEN b1=b2
* NOTHING EXISTS SUBSEQUENT TO 3
* FOLLOWING NUMERICAL VALUE ARE ENTERED WHEN B1=7
  1:CH1 2:CH2 3:EXT 4:SERIAL SELECTION
* ONE OF OPTIONS WHEN b1=8
* COLON(:) IS ENTERED BETWEEN b1 &b2 WHEN THIS PARAMETER DOES NOT EXIST

b:3 MAXIMUM VALUE
* NOTHING EXISTS AFTER b1=2
* 8 IS ONE OF OPTIONS

EXAMPLE: BASIC COMMAND FILE FORMAT

FIG. 11C

USAGE EXAMPLE

COMMAND RESPONDING TEST ID TRANSMISSION TO TARGET T_TESTID(3),testid(2:3),rwait(1:1:99999)
WRITE COMMAND TO PLTS P_REGWR(3),wrname(3:),wrdt(1:0:255)

EXAMPLE: BASIC COMMAND FILE FORMAT

FIG. 12

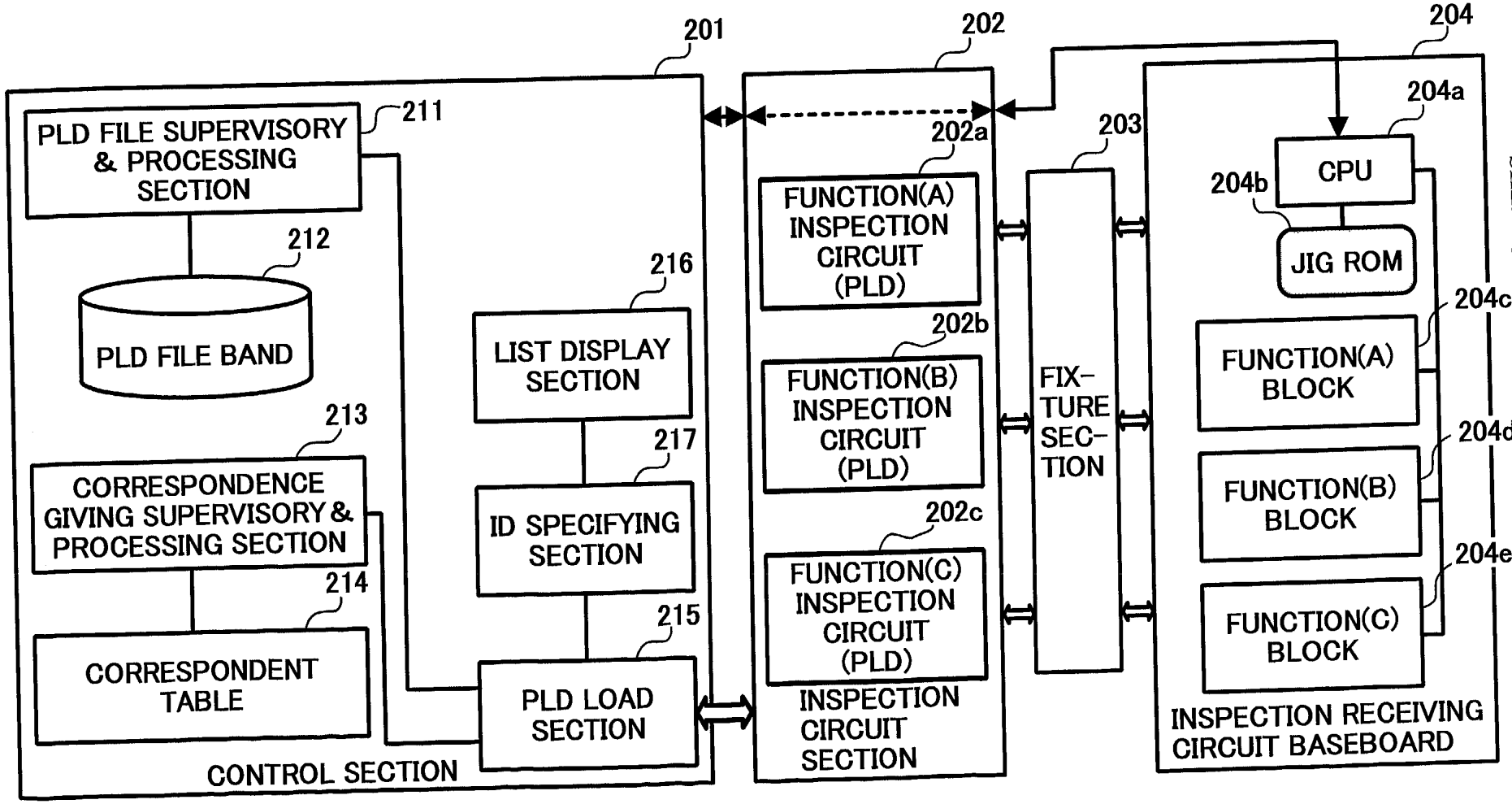


FIG. 13

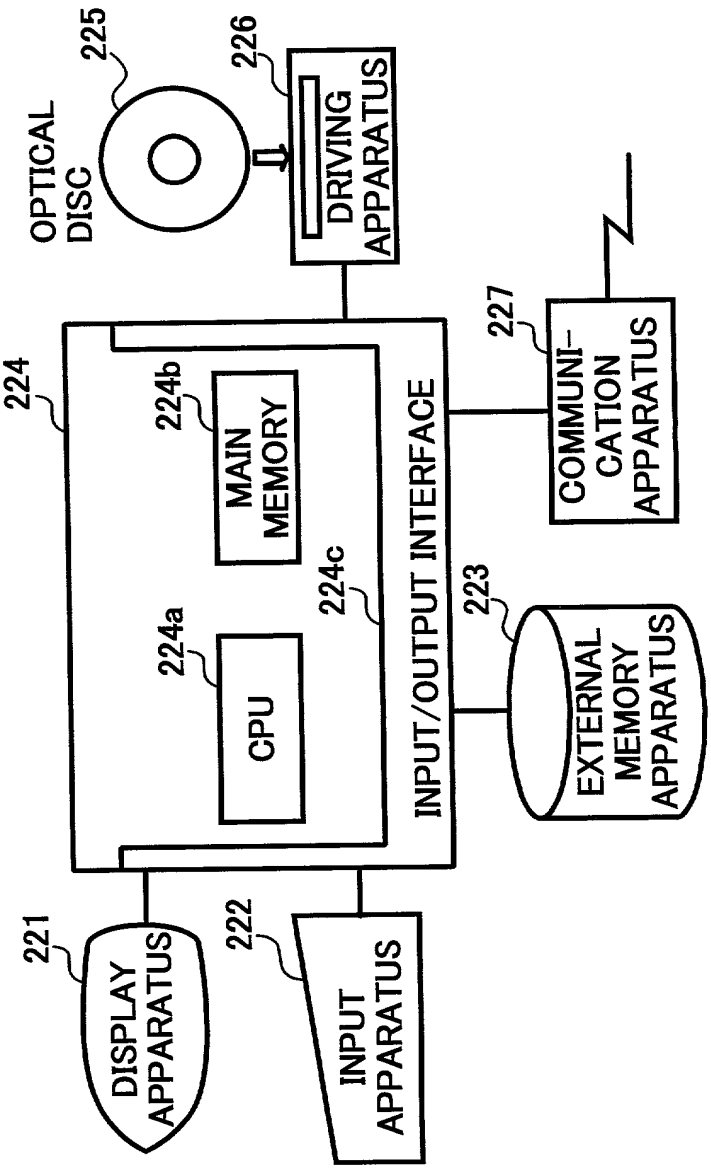

OPTICAL DISC
225
226
DRIVING APPARATUS
224
224b
MAIN MEMORY
224c
224a
CPU
INPUT/OUTPUT INTERFACE
227
COMMUNI-CATION APPARATUS
223
EXTERNAL MEMORY APPARATUS
221
DISPLAY APPARATUS
222
INPUT APPARATUS

FIG. 14

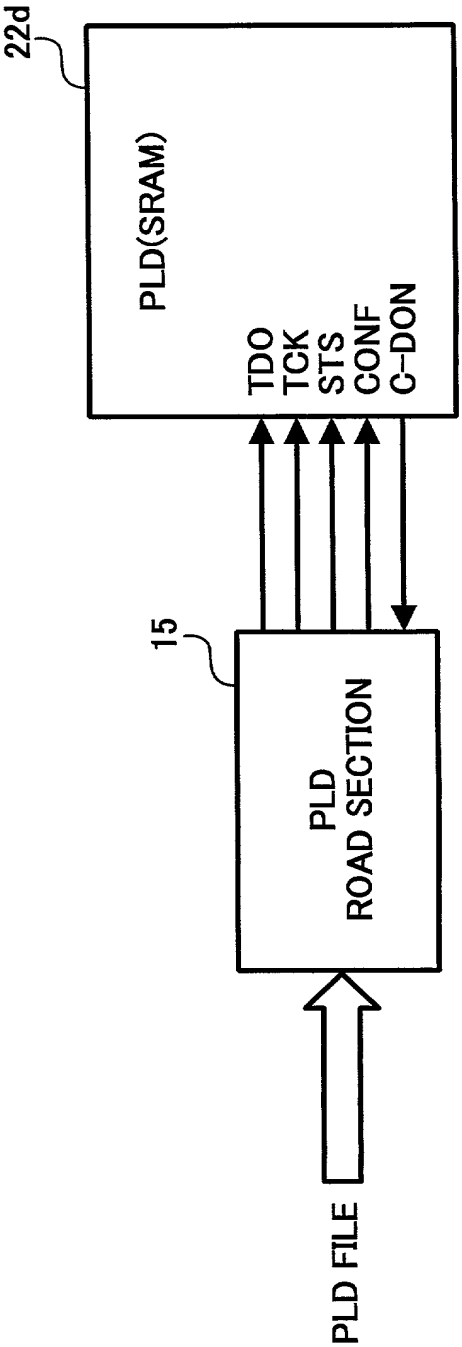

22d
PLD(SRAM)
TDO
TCK
STS
CONF
C-DON
15
PLD
ROAD SECTION
PLD FILE

FIG. 15

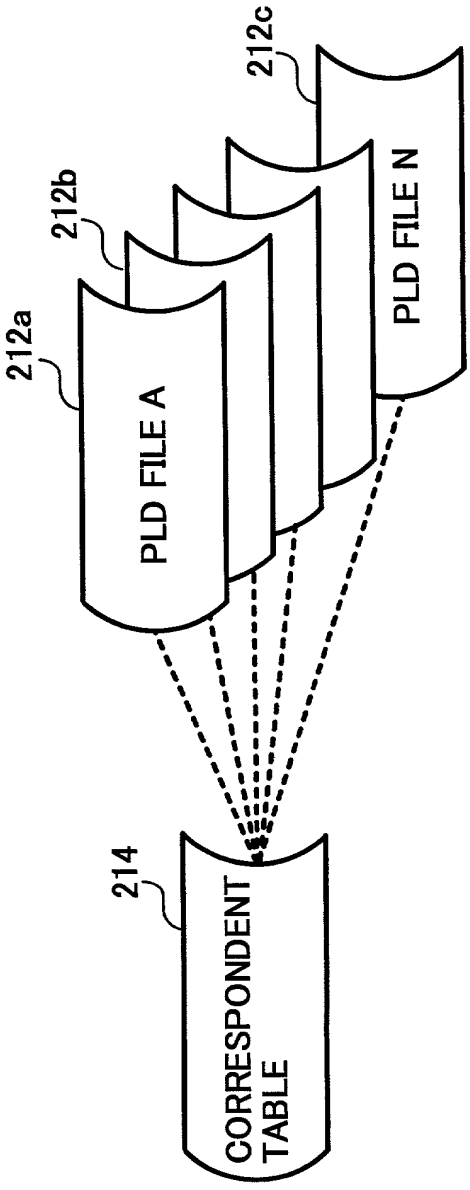


FIG. 16

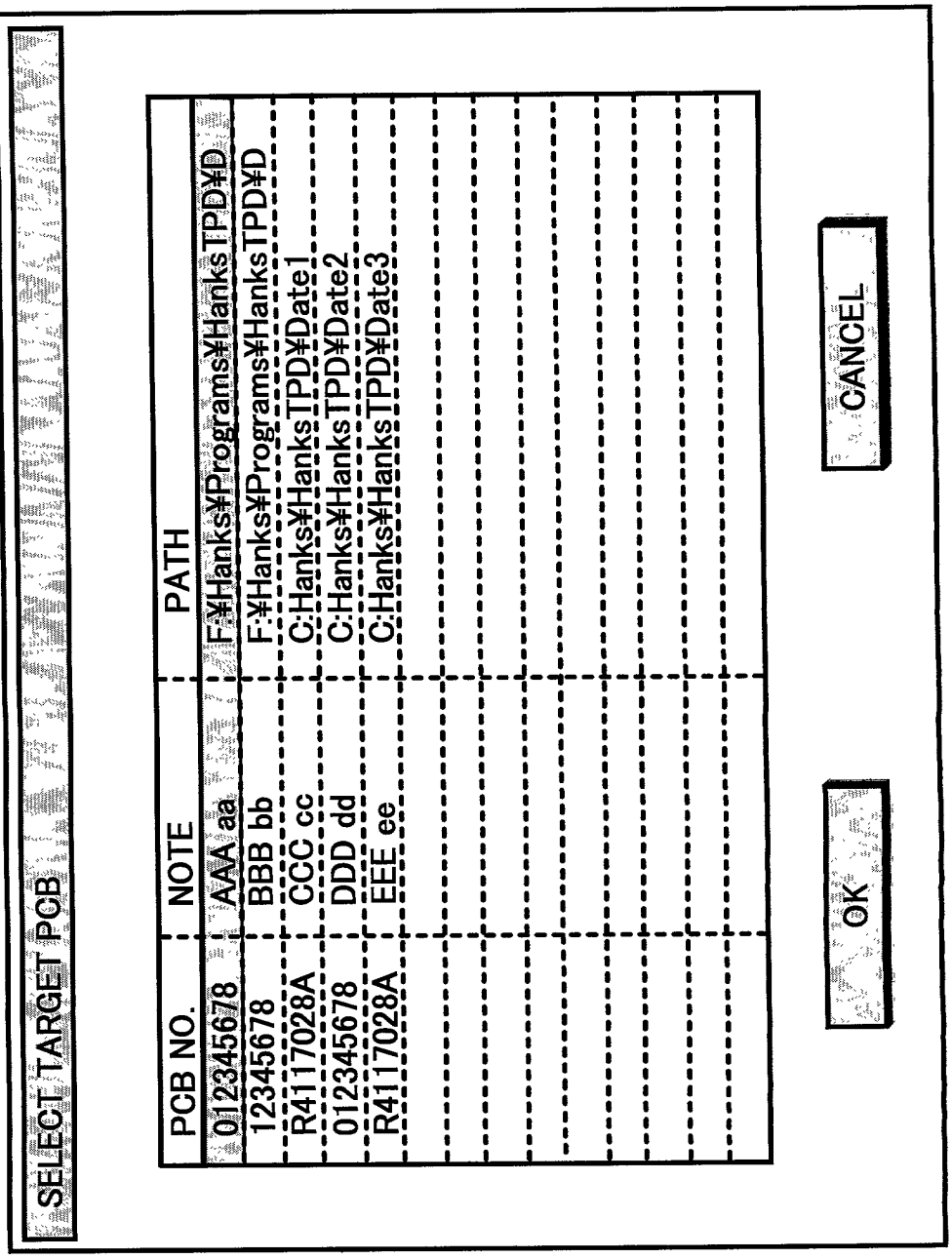

16a
SELECT TARGET PCB
PCB NO.
NOTE
PATH
01234567 8
AAA aa
F:¥Hanks¥Programs¥HanksTPD¥D
12345678
BBB bb
F:¥Hanks¥Programs¥HanksTPD¥D
R4117028A
CCC cc
C:Hanks¥HanksTPD¥Date1
01234567 8
DDD dd
C:Hanks¥HanksTPD¥Date2
R4117028A
EEE ee
C:Hanks¥HanksTPD¥Date3
OK
CANCEL

FIG. 17

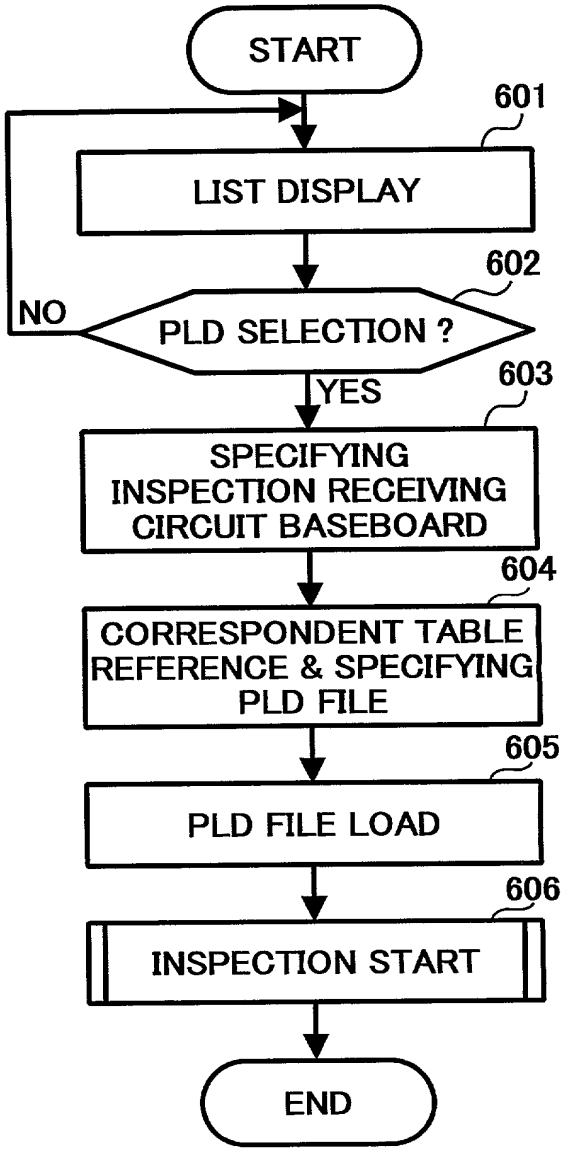

START
601
LIST DISPLAY
602
NO
PLD SELECTION ?
YES
603
SPECIFYING INSPECTION RECEIVING CIRCUIT BASEBOARD
604
CORRESPONDENT TABLE REFERENCE & SPECIFYING PLD FILE
605
PLD FILE LOAD
606
INSPECTION START
END

FIG. 18

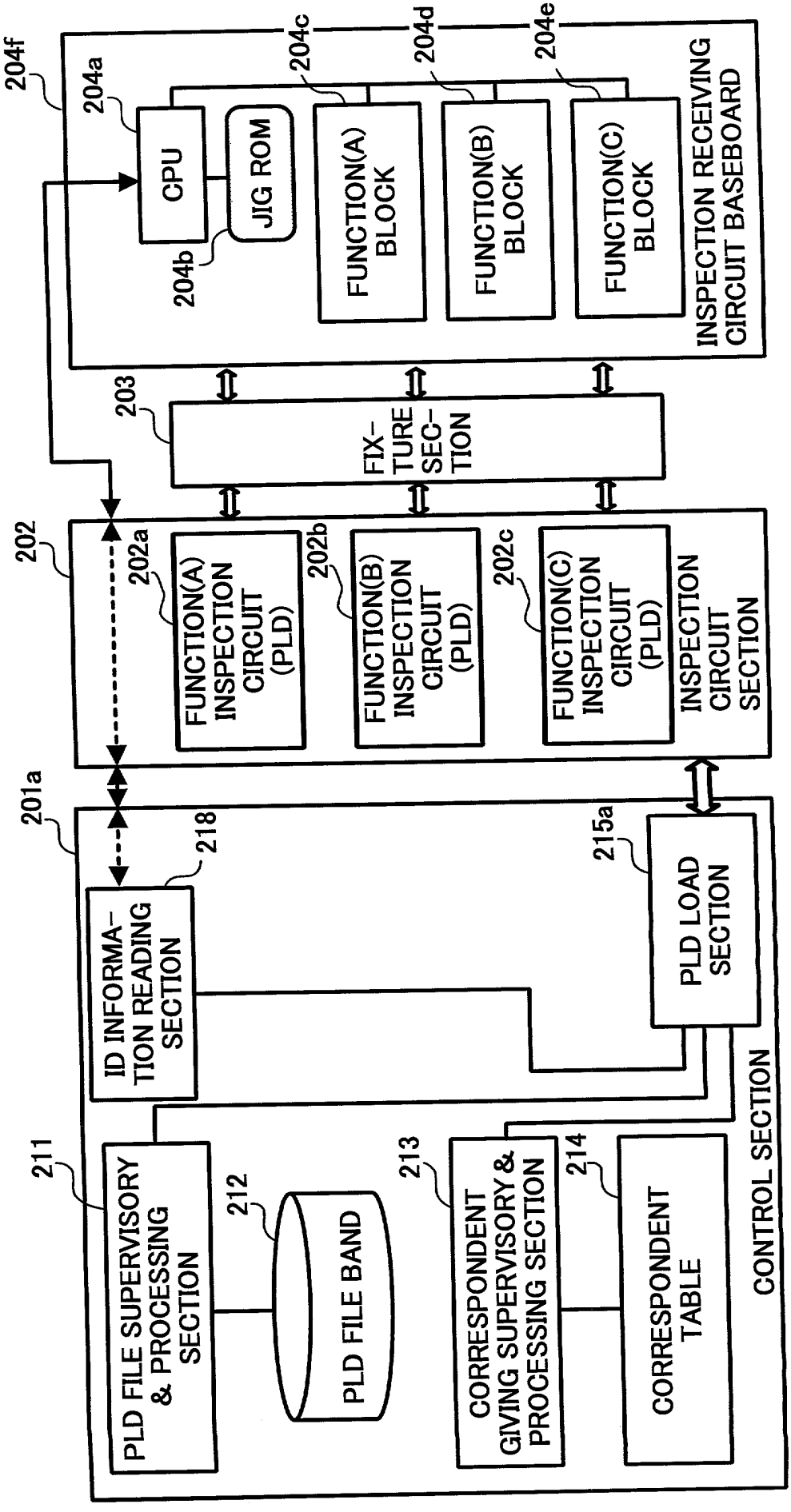

204f
204a
204c
204d
204e
CPU
JIG ROM
204b
FUNCTION(A) BLOCK
FUNCTION(B) BLOCK
FUNCTION(C) BLOCK
INSPECTION RECEIVING CIRCUIT BASEBOARD
203
FIX-TURE SEC-TION
202
202a
FUNCTION(A) INSPECTION CIRCUIT (PLD)
202b
FUNCTION(B) INSPECTION CIRCUIT (PLD)
202c
FUNCTION(C) INSPECTION CIRCUIT (PLD)
INSPECTION CIRCUIT SECTION
201a
218
ID INFORMA-TION READING SECTION
215a
PLD LOAD SECTION
211
PLD FILE SUPERVISORY & PROCESSING SECTION
212
PLD FILE BAND
213
CORRESPONDENT GIVING SUPERVISORY & PROCESSING SECTION
214
CORRESPONDENT TABLE
CONTROL SECTION

FIG. 19

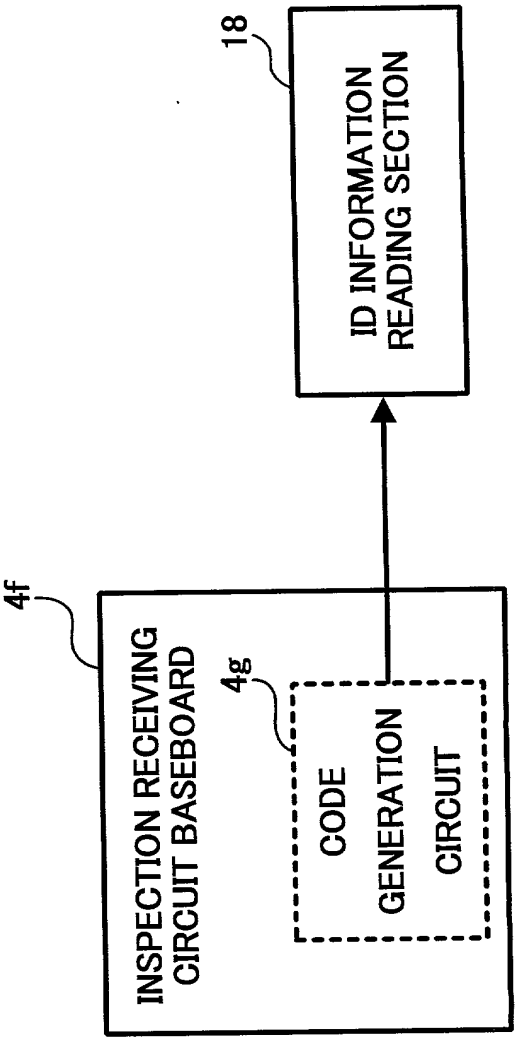

18
ID INFORMATION READING SECTION
4f
INSPECTION RECEIVING CIRCUIT BASEBOARD
4g
CODE GENERATION CIRCUIT

FIG. 20

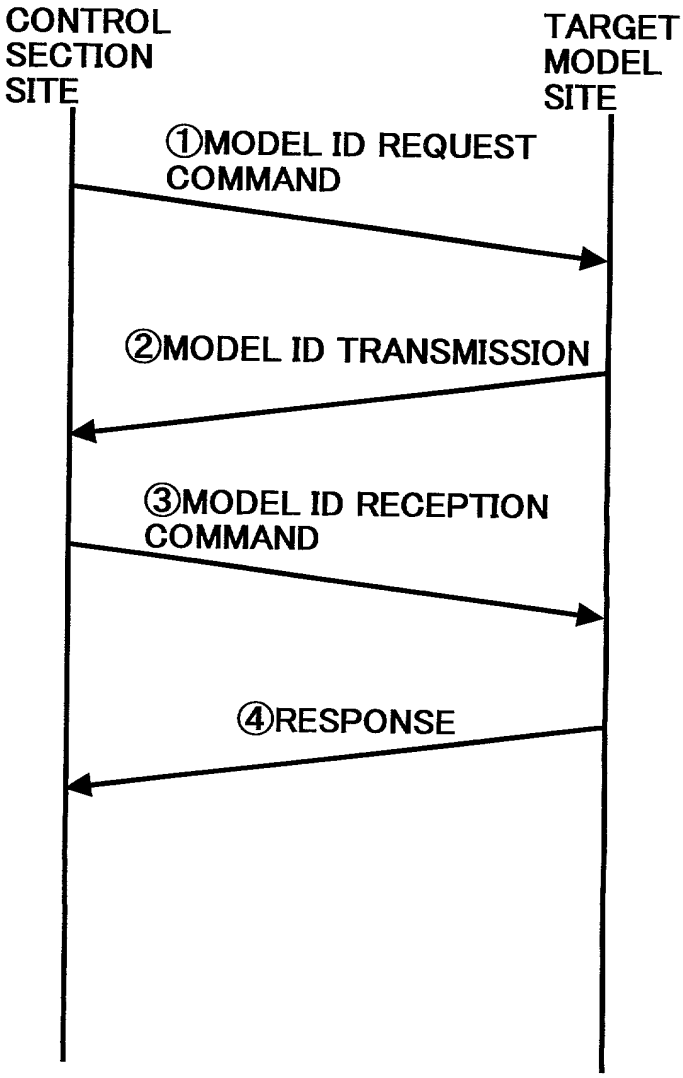

CONTROL SECTION SITE
TARGET MODEL SITE
①MODEL ID REQUEST COMMAND
②MODEL ID TRANSMISSION
③MODEL ID RECEPTION COMMAND
④RESPONSE

FIG. 21

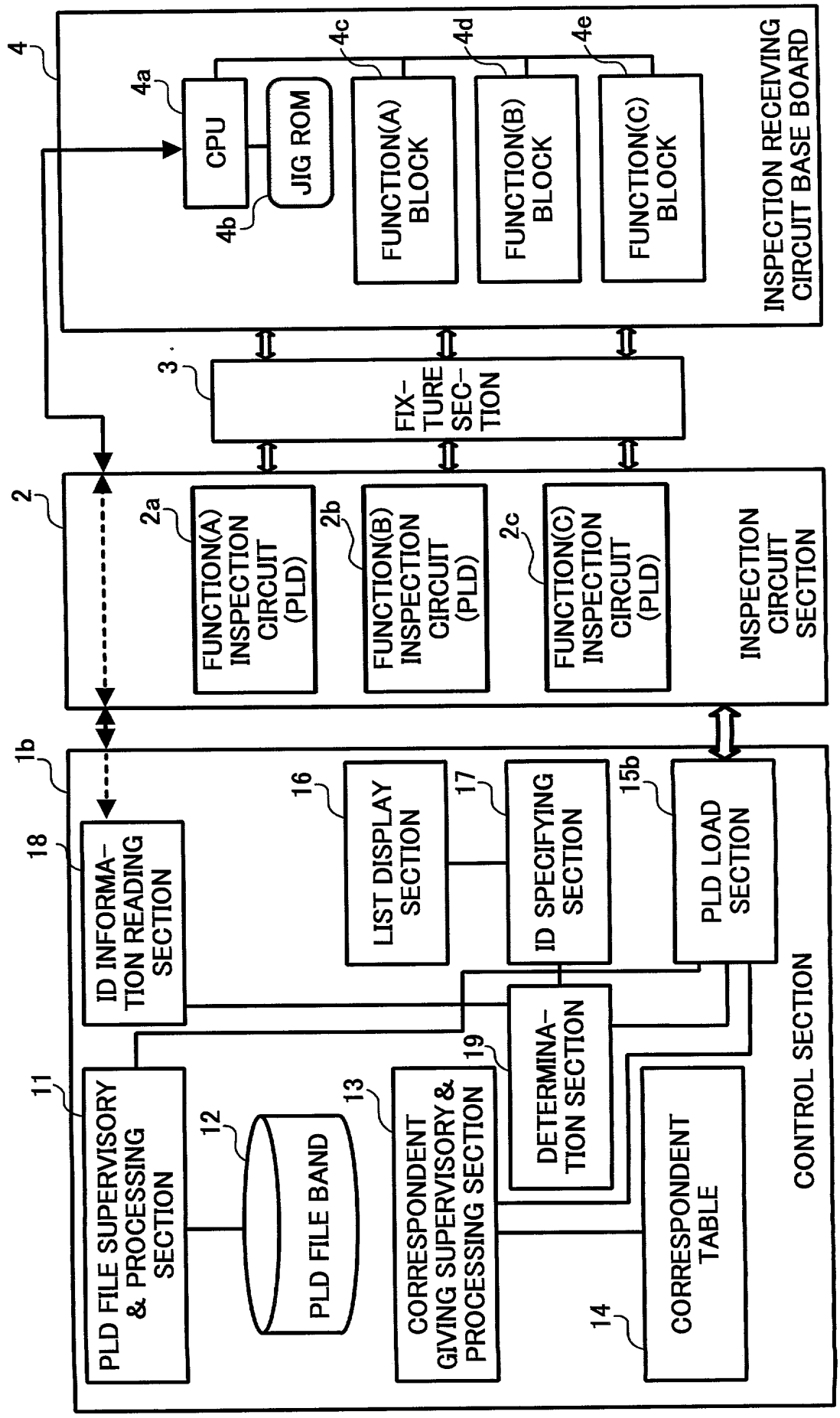

4
4a
CPU
4b
JIG ROM
4c
FUNCTION(A) BLOCK
4d
FUNCTION(B) BLOCK
4e
FUNCTION(C) BLOCK
INSPECTION RECEIVING CIRCUIT BASE BOARD
3
FIX-TURE SEC-TION
2
2a
FUNCTION(A) INSPECTION CIRCUIT (PLD)
2b
FUNCTION(B) INSPECTION CIRCUIT (PLD)
2c
FUNCTION(C) INSPECTION CIRCUIT (PLD)
INSPECTION CIRCUIT SECTION
1b
16
LIST DISPLAY SECTION
17
ID SPECIFYING SECTION
15b
PLD LOAD SECTION
18
ID INFORMA-TION READING SECTION
11
PLD FILE SUPERVISORY & PROCESSING SECTION
12
PLD FILE BAND
13
CORRESPONDENT GIVING SUPERVISORY & PROCESSING SECTION
19
DETERMINA-TION SECTION
14
CORRESPONDENT TABLE
CONTROL SECTION

FIG. 22

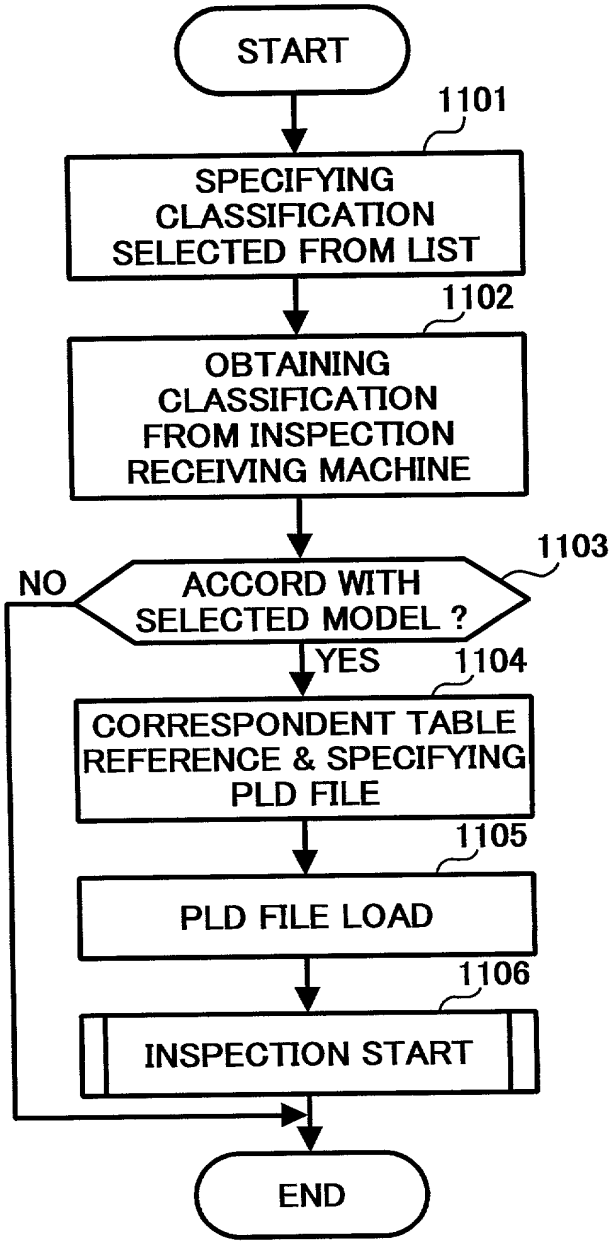

START
1101
SPECIFYING CLASSIFICATION SELECTED FROM LIST
1102
OBTAINING CLASSIFICATION FROM INSPECTION RECEIVING MACHINE
1103
NO
ACCORD WITH SELECTED MODEL ?
YES
1104
CORRESPONDENT TABLE REFERENCE & SPECIFYING PLD FILE
1105
PLD FILE LOAD
1106
INSPECTION START
END

FIG. 23

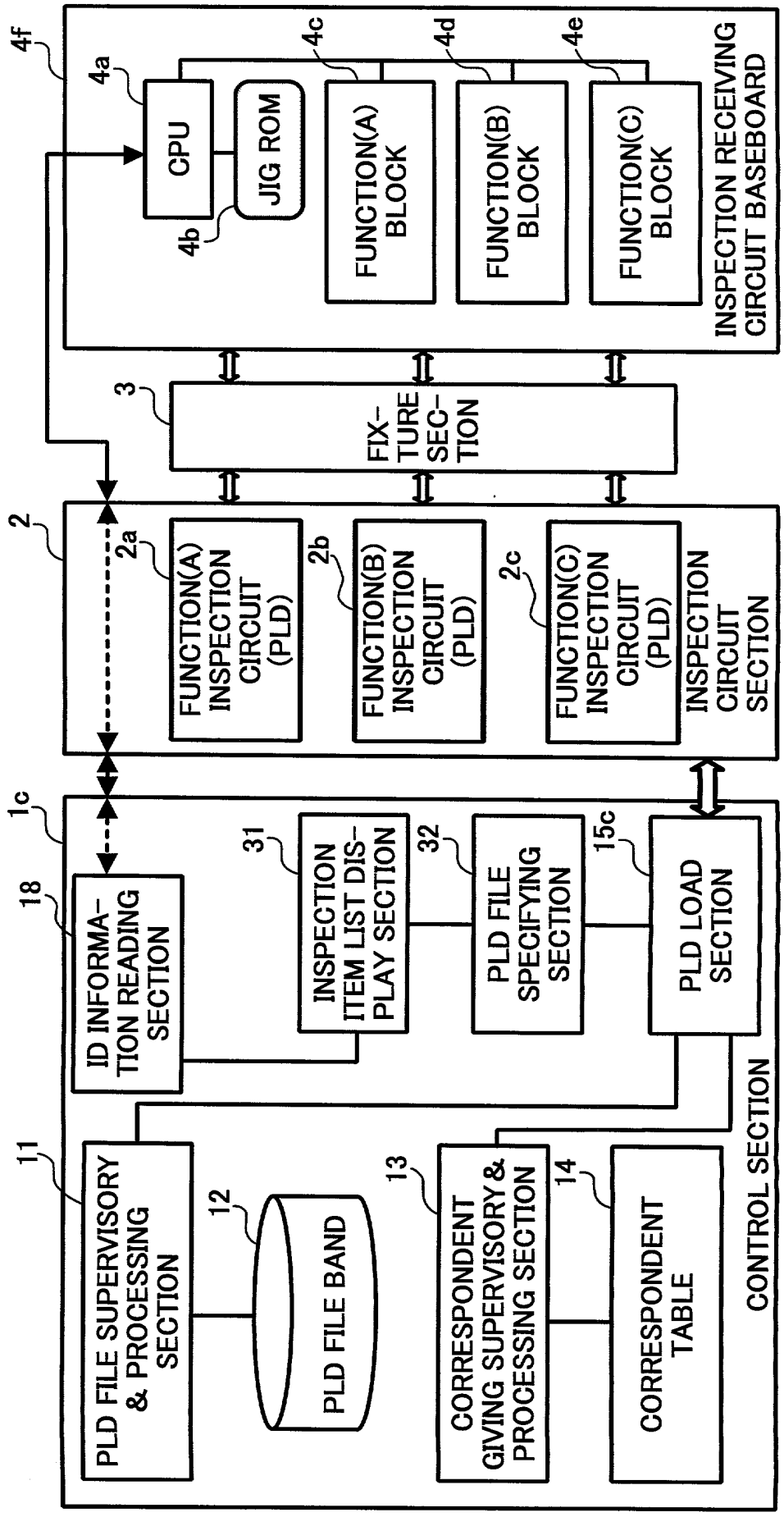

4f
4a
CPU
4b
JIG ROM
4c
FUNCTION(A) BLOCK
4d
FUNCTION(B) BLOCK
4e
FUNCTION(C) BLOCK
INSPECTION RECEIVING CIRCUIT BASEBOARD
3
FIX-TURE SEC-TION
2
2a
FUNCTION(A) INSPECTION CIRCUIT (PLD)
2b
FUNCTION(B) INSPECTION CIRCUIT (PLD)
2c
FUNCTION(C) INSPECTION CIRCUIT (PLD)
INSPECTION CIRCUIT SECTION
1c
18
ID INFORMA-TION READING SECTION
31
INSPECTION ITEM LIST DIS-PLAY SECTION
32
PLD FILE SPECIFYING SECTION
15c
PLD LOAD SECTION
11
PLD FILE SUPERVISORY & PROCESSING SECTION
12
PLD FILE BAND
13
CORRESPONDENT GIVING SUPERVISORY & PROCESSING SECTION
14
CORRESPONDENT TABLE
CONTROL SECTION

FIG. 24

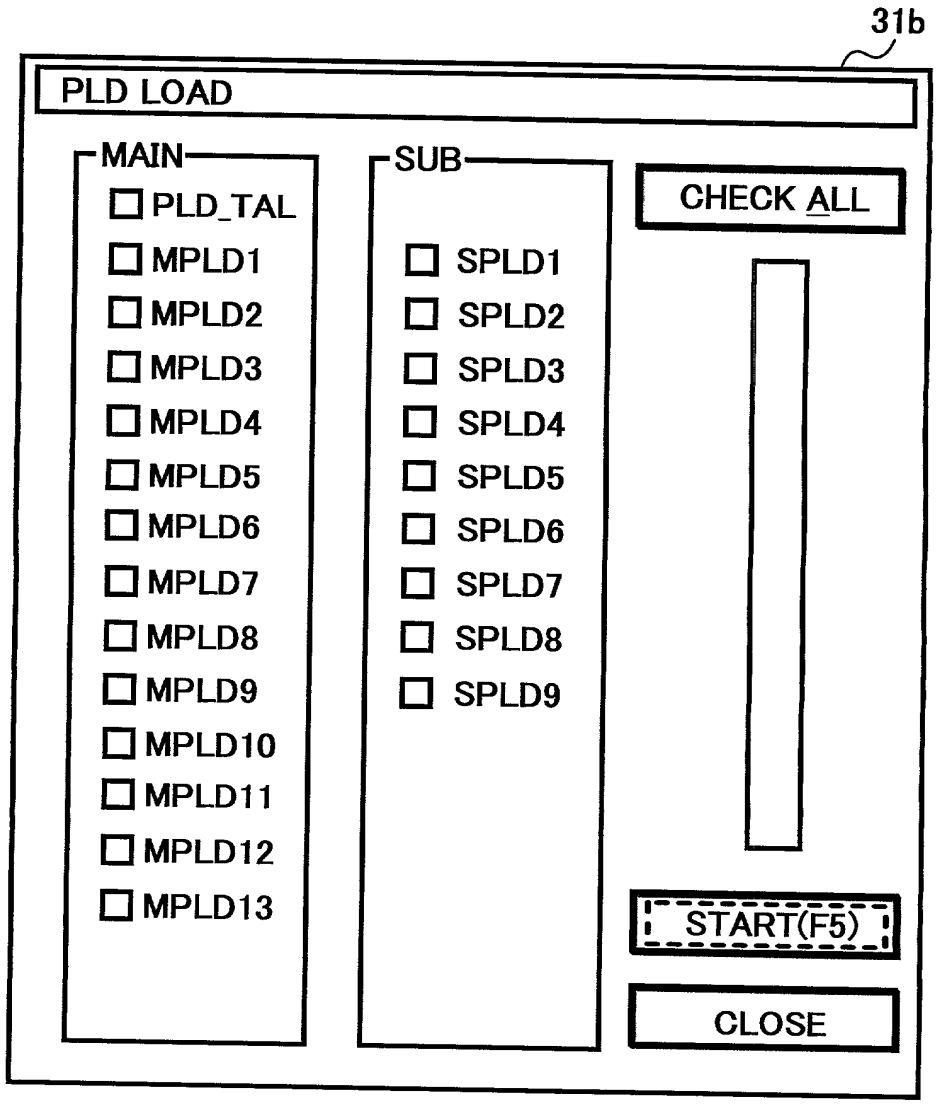

31b
PLD LOAD
MAIN
PLD_TAL
MPLD1
MPLD2
MPLD3
MPLD4
MPLD5
MPLD6
MPLD7
MPLD8
MPLD9
MPLD10
MPLD11
MPLD12
MPLD13
SUB
SPLD1
SPLD2
SPLD3
SPLD4
SPLD5
SPLD6
SPLD7
SPLD8
SPLD9
CHECK ALL
START(F5)
CLOSE

FIG. 25

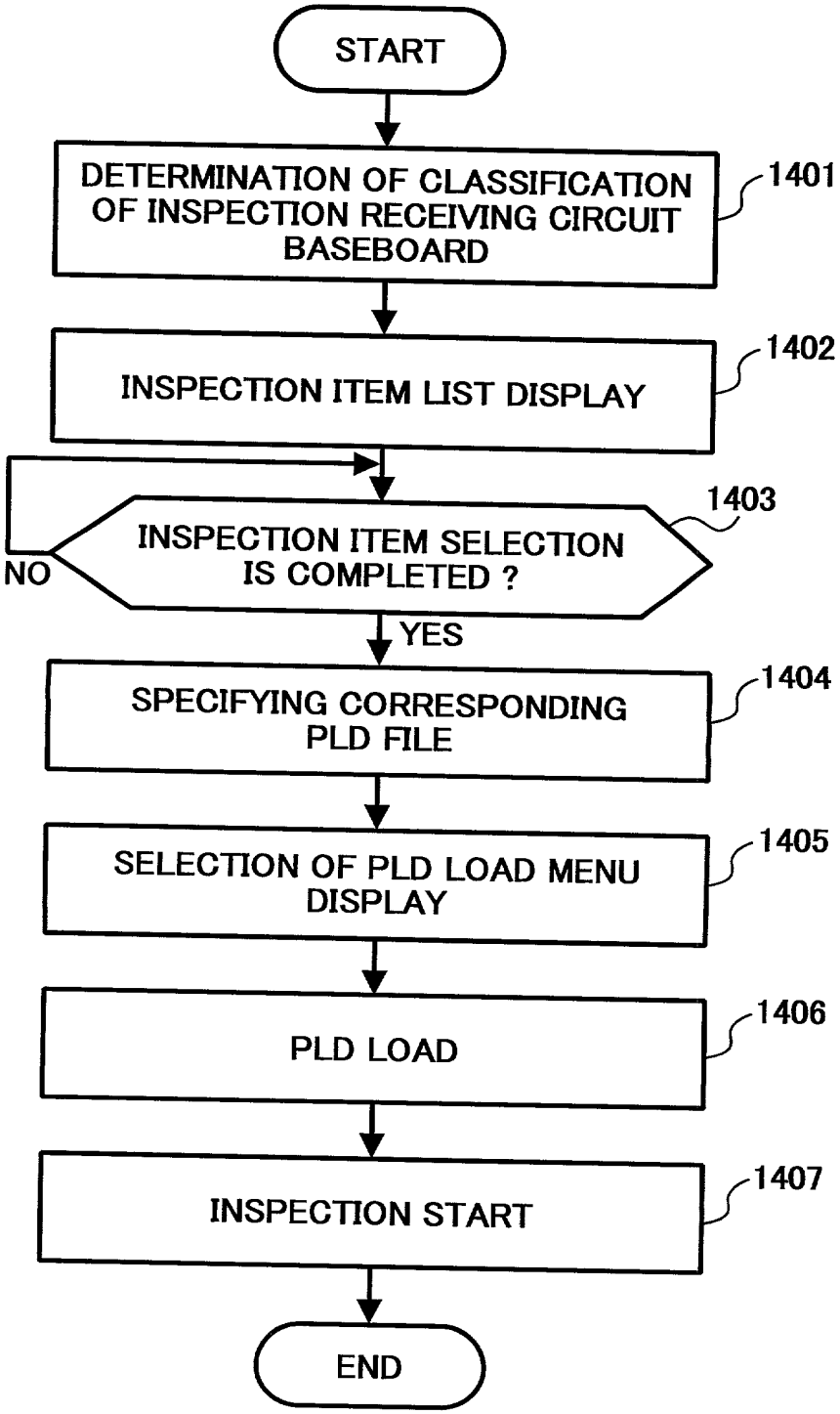

START
DETERMINATION OF CLASSIFICATION OF INSPECTION RECEIVING CIRCUIT BASEBOARD
1401
INSPECTION ITEM LIST DISPLAY
1402
INSPECTION ITEM SELECTION IS COMPLETED ?
1403
NO
YES
SPECIFYING CORRESPONDING PLD FILE
1404
SELECTION OF PLD LOAD MENU DISPLAY
1405
PLD LOAD
1406
INSPECTION START
1407
END

FIG. 26

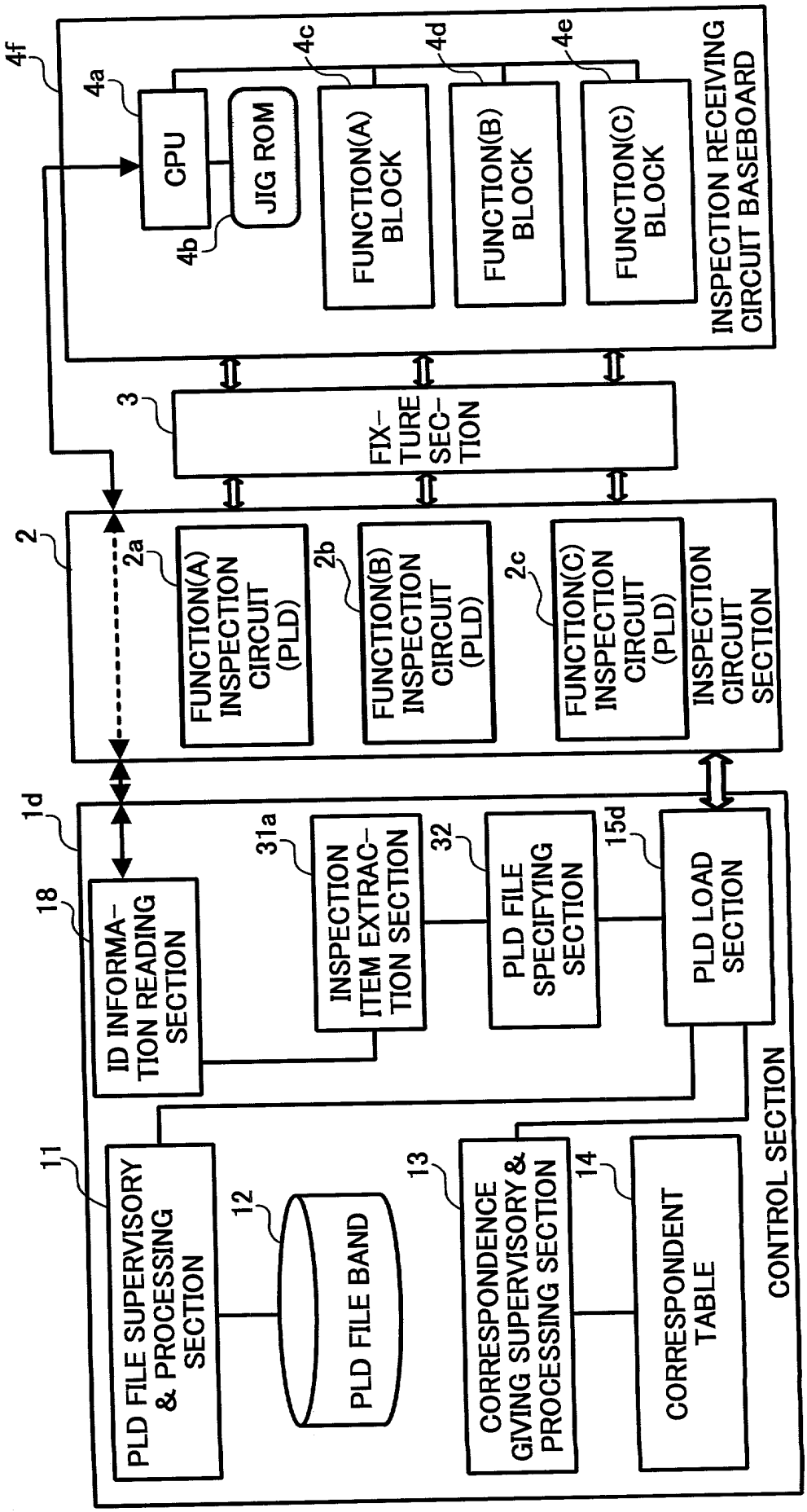

4f
4a
CPU
4b
JIG ROM
4c
FUNCTION(A) BLOCK
4d
FUNCTION(B) BLOCK
4e
FUNCTION(C) BLOCK
INSPECTION RECEIVING CIRCUIT BASEBOARD
3
FIX-TURE SEC-TION
2
2a
FUNCTION(A) INSPECTION CIRCUIT (PLD)
2b
FUNCTION(B) INSPECTION CIRCUIT (PLD)
2c
FUNCTION(C) INSPECTION CIRCUIT (PLD)
INSPECTION CIRCUIT SECTION
1d
18
ID INFORMA-TION READING SECTION
31a
INSPECTION ITEM EXTRAC-TION SECTION
32
PLD FILE SPECIFYING SECTION
15d
PLD LOAD SECTION
11
PLD FILE SUPERVISORY & PROCESSING SECTION
12
PLD FILE BAND
13
CORRESPONDENCE GIVING SUPERVISORY & PROCESSING SECTION
14
CORRESPONDENT TABLE
CONTROL SECTION

FIG. 27

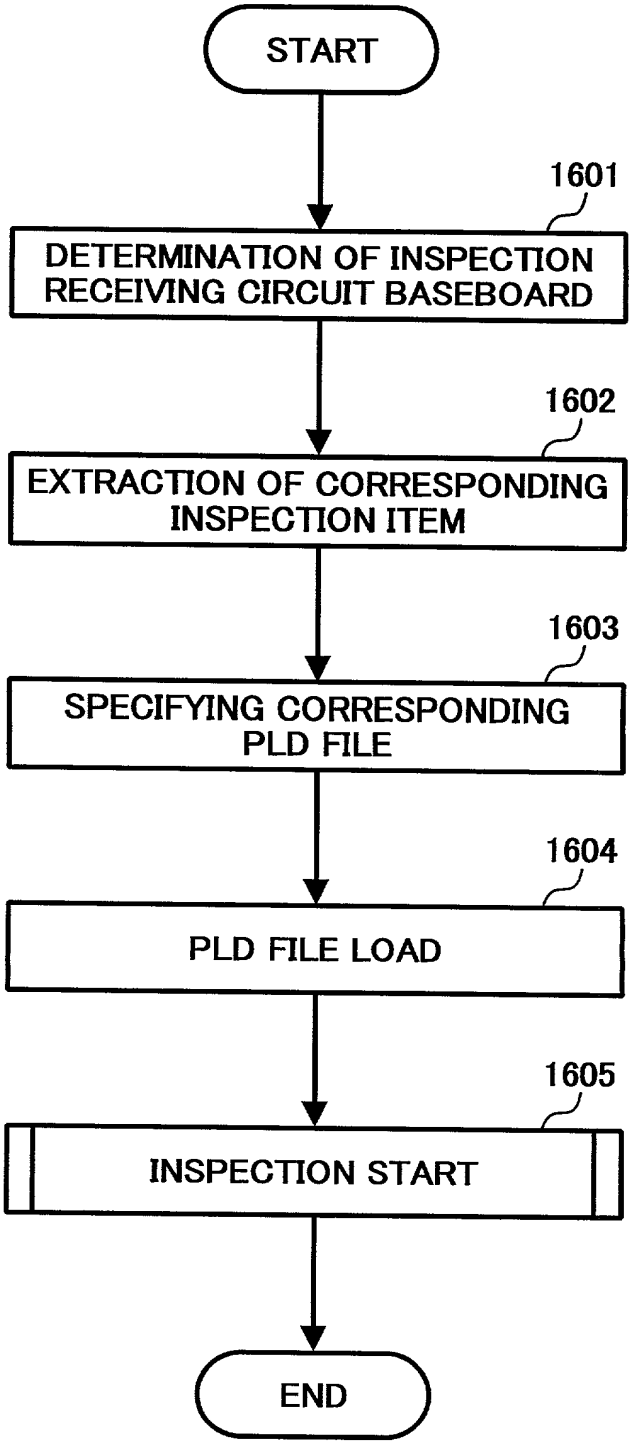

START
1601
DETERMINATION OF INSPECTION RECEIVING CIRCUIT BASEBOARD
1602
EXTRACTION OF CORRESPONDING INSPECTION ITEM
1603
SPECIFYING CORRESPONDING PLD FILE
1604
PLD FILE LOAD
1605
INSPECTION START
END

FIG. 28

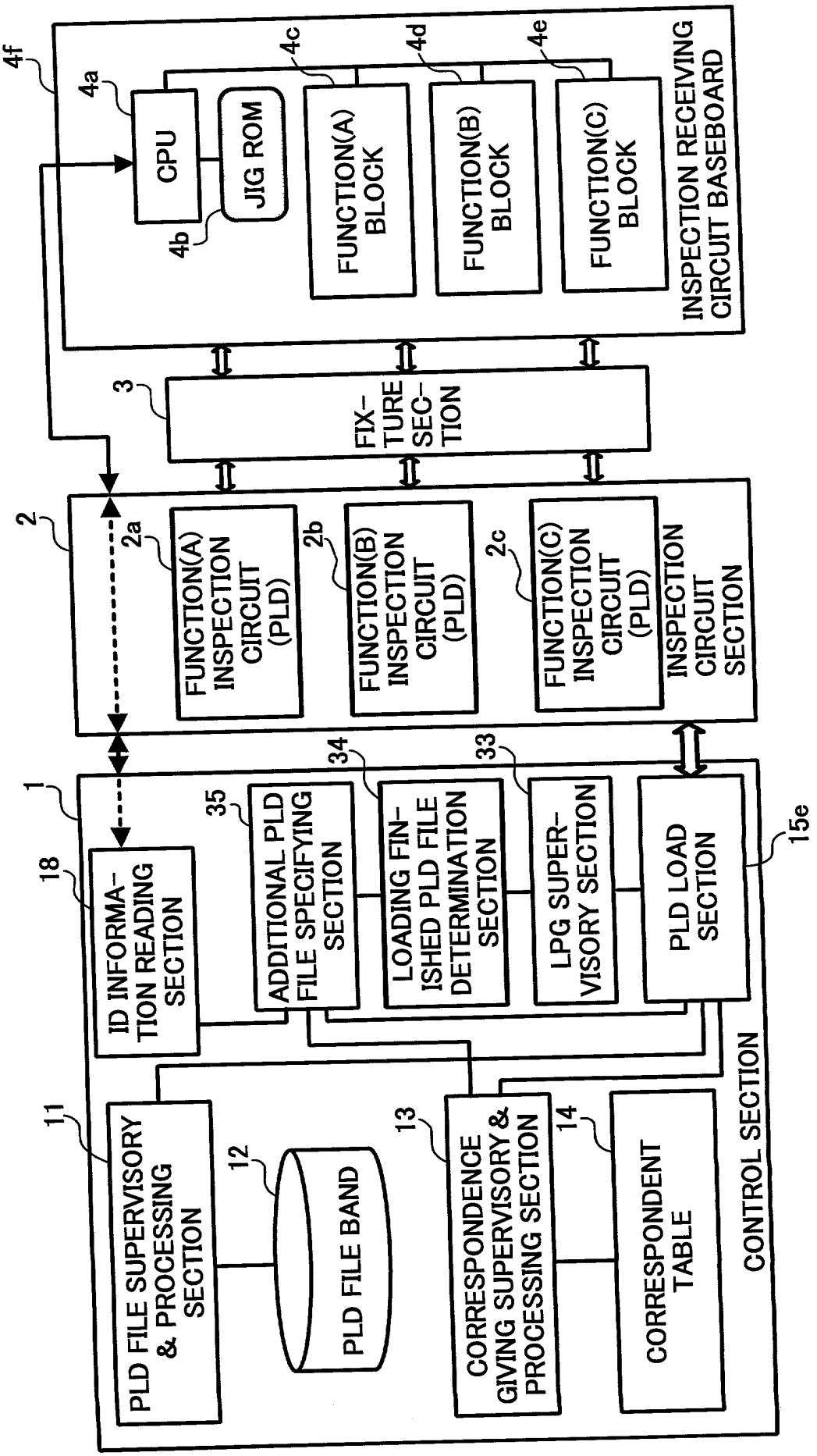

4f
4a
CPU
4b
JIG ROM
4c
FUNCTION(A) BLOCK
4d
FUNCTION(B) BLOCK
4e
FUNCTION(C) BLOCK
INSPECTION RECEIVING CIRCUIT BASEBOARD
3
FIX-TURE SEC-TION
2
2a
FUNCTION(A) INSPECTION CIRCUIT (PLD)
2b
FUNCTION(B) INSPECTION CIRCUIT (PLD)
2c
FUNCTION(C) INSPECTION CIRCUIT (PLD)
INSPECTION CIRCUIT SECTION
1
18
ID INFORMA-TION READING SECTION
35
ADDITIONAL PLD FILE SPECIFYING SECTION
34
LOADING FIN-ISHED PLD FILE DETERMINATION SECTION
33
LPG SUPER-VISORY SECTION
PLD LOAD SECTION
15e
11
PLD FILE SUPERVISORY & PROCESSING SECTION
12
PLD FILE BAND
13
CORRESPONDENCE GIVING SUPERVISORY & PROCESSING SECTION
14
CORRESPONDENT TABLE
CONTROL SECTION

FIG. 29

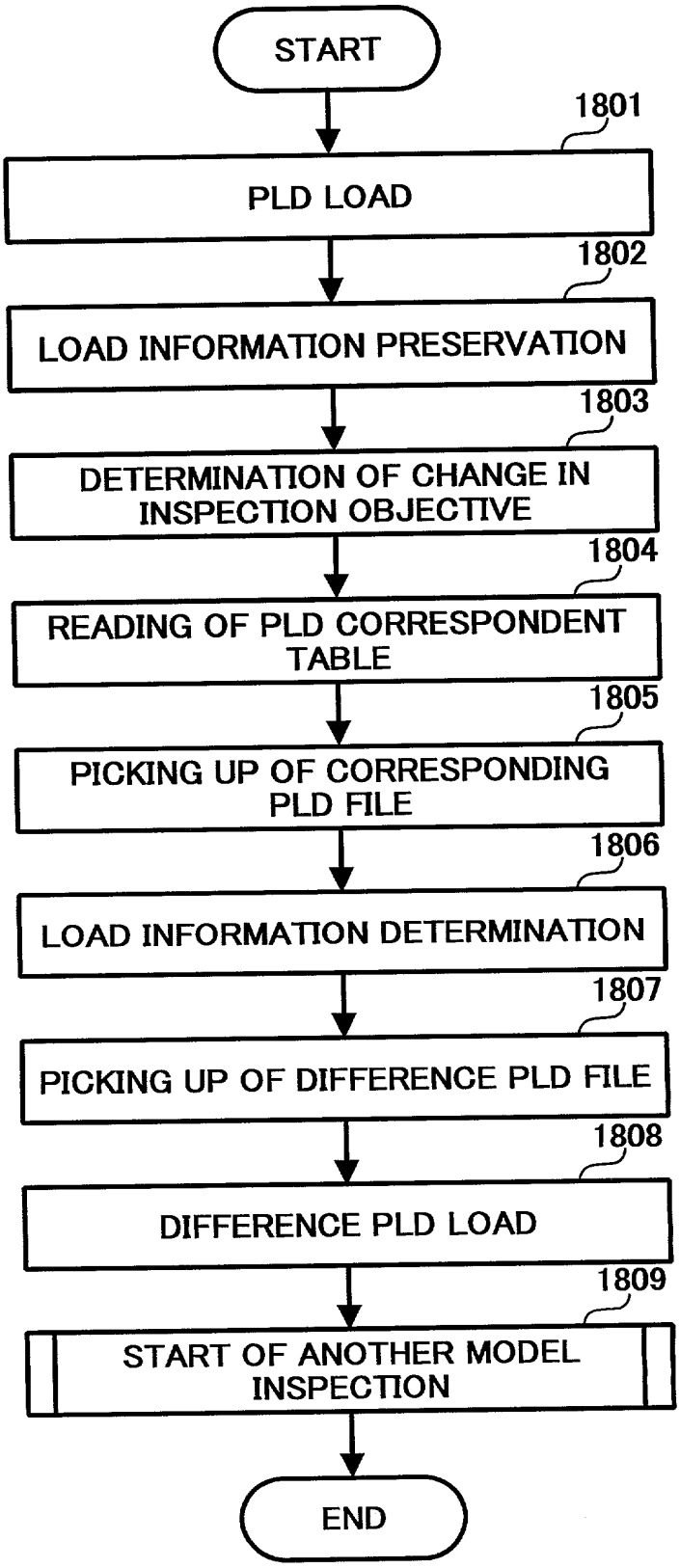

START
1801
PLD LOAD
1802
LOAD INFORMATION PRESERVATION
1803
DETERMINATION OF CHANGE IN INSPECTION OBJECTIVE
1804
READING OF PLD CORRESPONDENT TABLE
1805
PICKING UP OF CORRESPONDING PLD FILE
1806
LOAD INFORMATION DETERMINATION
1807
PICKING UP OF DIFFERENCE PLD FILE
1808
DIFFERENCE PLD LOAD
1809
START OF ANOTHER MODEL INSPECTION
END

FIG. 30

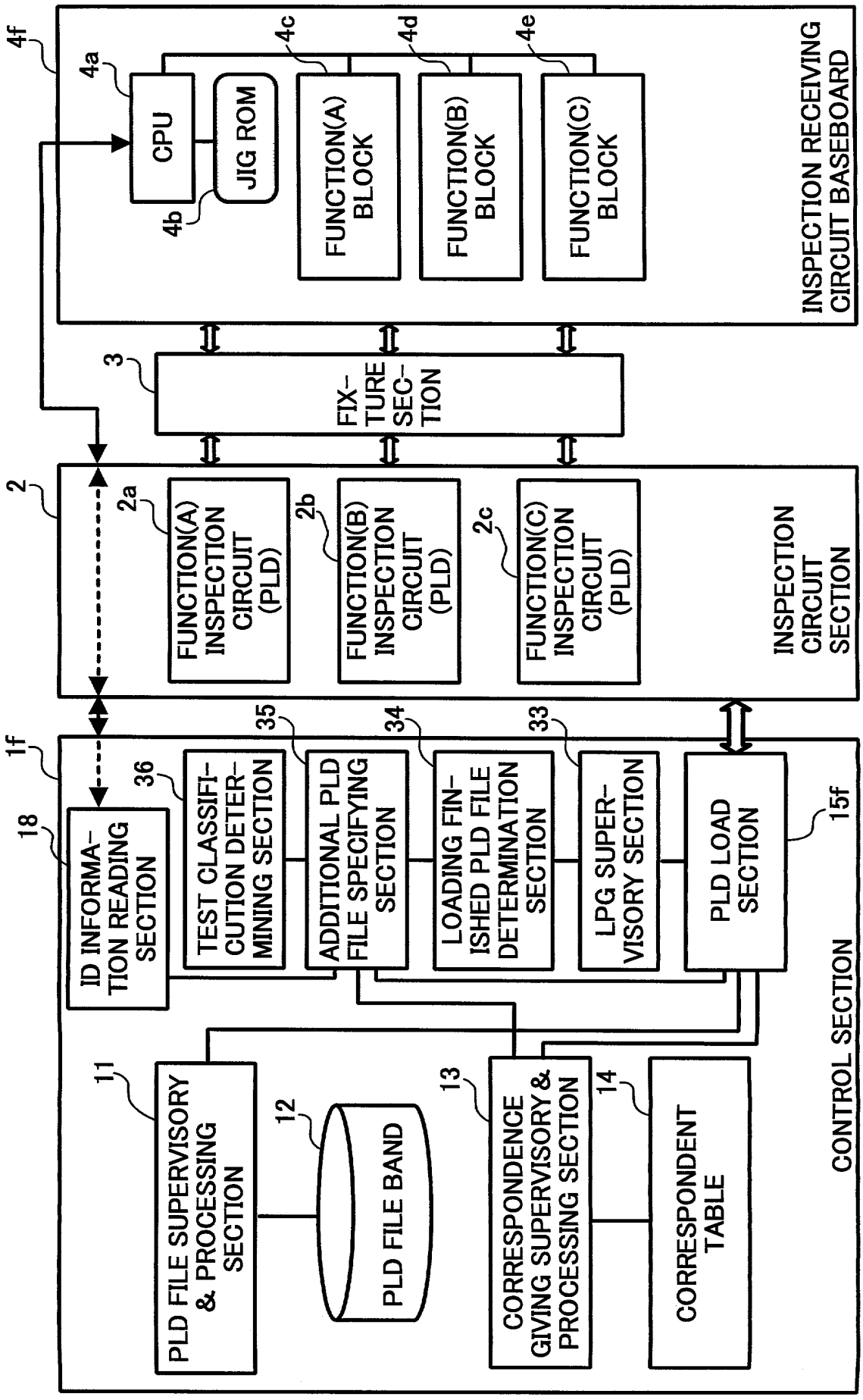

4f
4a
CPU
4b
JIG ROM
4c
FUNCTION(A) BLOCK
4d
FUNCTION(B) BLOCK
4e
FUNCTION(C) BLOCK
INSPECTION RECEIVING CIRCUIT BASEBOARD
3
FIX-TURE SEC-TION
2
2a
FUNCTION(A) INSPECTION CIRCUIT (PLD)
2b
FUNCTION(B) INSPECTION CIRCUIT (PLD)
2c
FUNCTION(C) INSPECTION CIRCUIT (PLD)
INSPECTION CIRCUIT SECTION
1f
18
ID INFORMA-TION READING SECTION
36
TEST CLASSIFI-CUTION DETER-MINING SECTION
35
ADDITIONAL PLD FILE SPECIFYING SECTION
34
LOADING FIN-ISHED PLD FILE DETERMINATION SECTION
33
LPG SUPER-VISORY SECTION
PLD LOAD SECTION
15f
11
PLD FILE SUPERVISORY & PROCESSING SECTION
12
PLD FILE BAND
13
CORRESPONDENCE GIVING SUPERVISORY & PROCESSING SECTION
14
CORRESPONDENT TABLE
CONTROL SECTION

FIG. 31

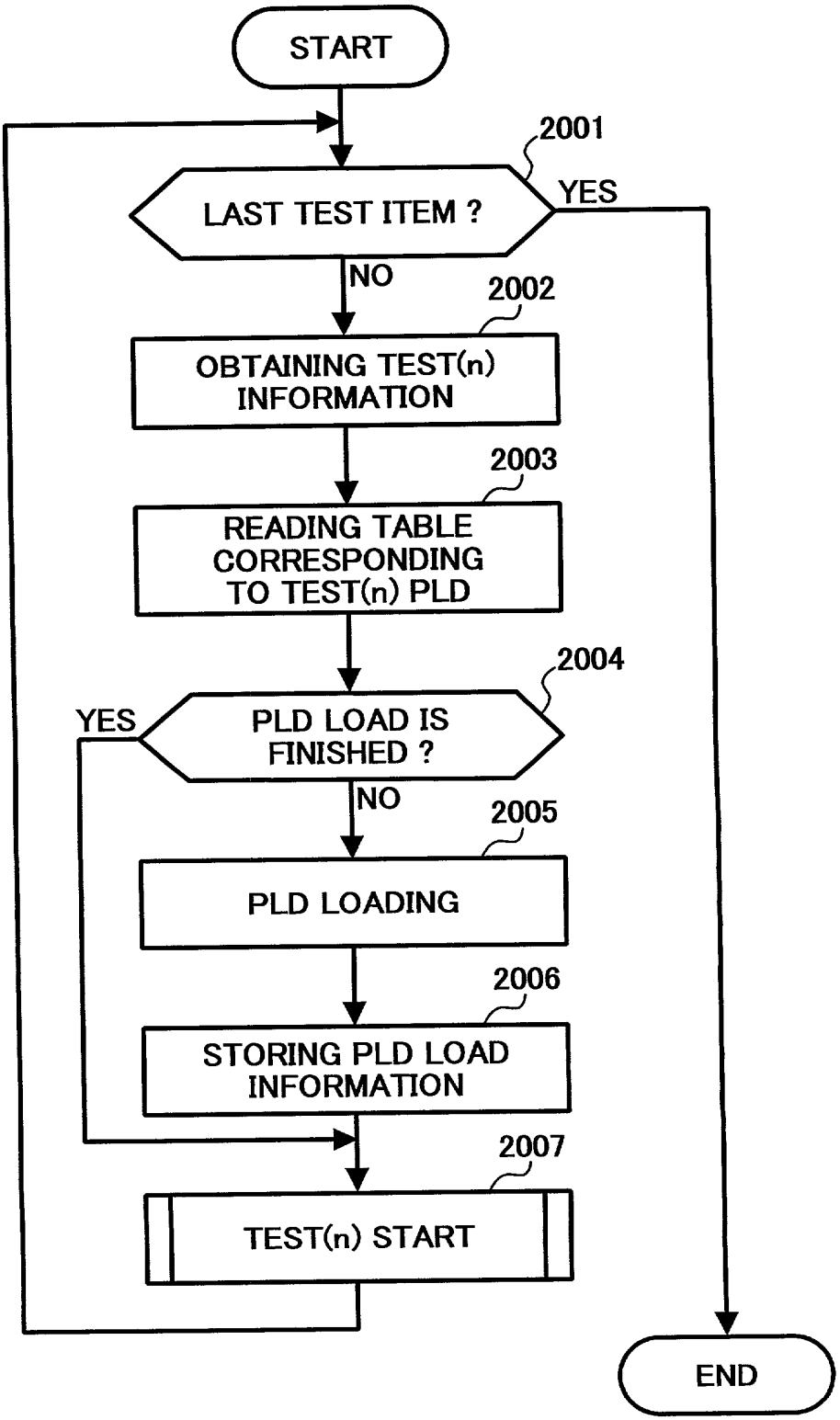

START
2001
LAST TEST ITEM ?
YES
NO
2002
OBTAINING TEST(n) INFORMATION
2003
READING TABLE CORRESPONDING TO TEST(n) PLD
2004
YES
PLD LOAD IS FINISHED ?
NO
2005
PLD LOADING
2006
STORING PLD LOAD INFORMATION
2007
TEST(n) START
END

FIG. 32

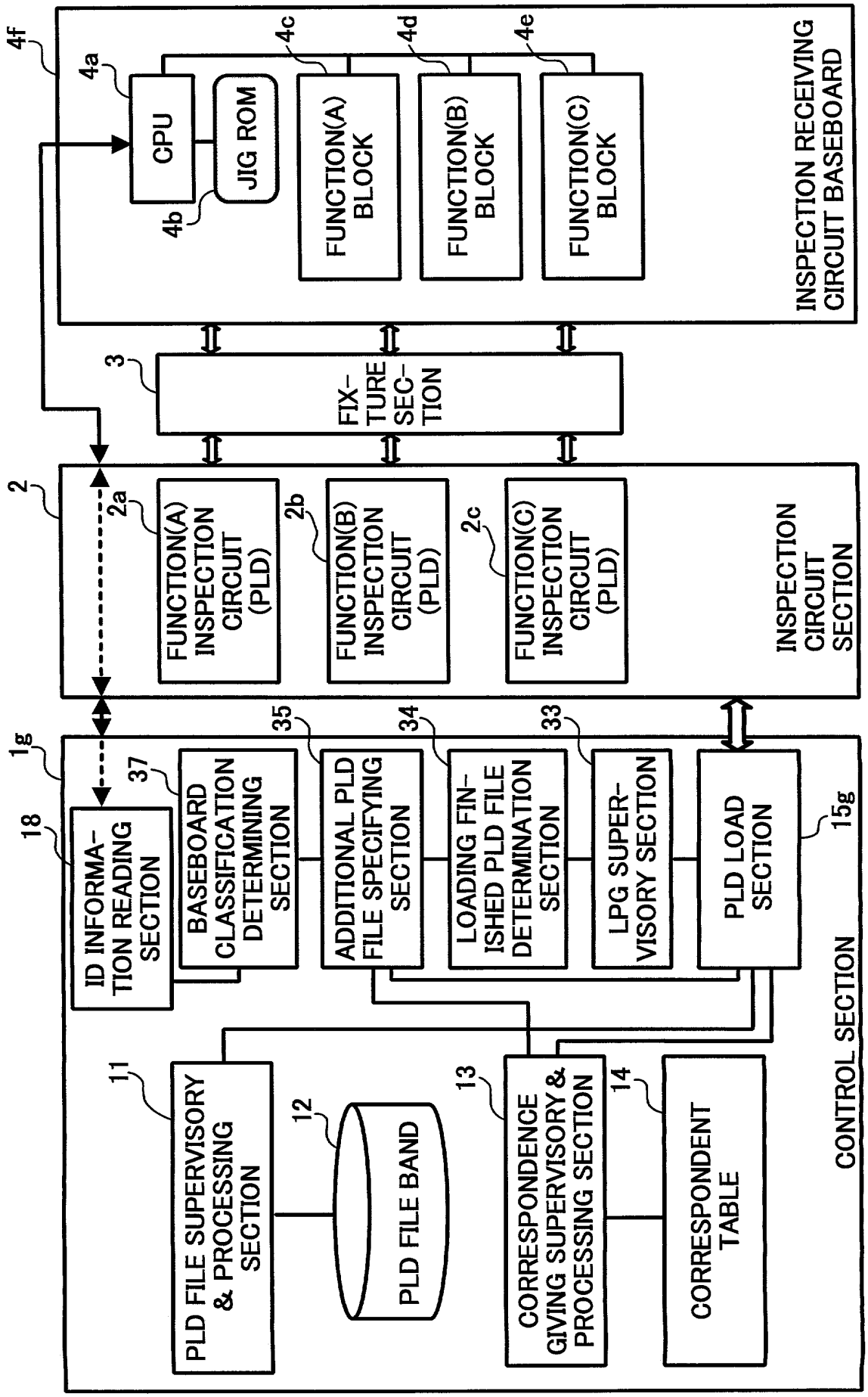

4f
4a
CPU
4b
JIG ROM
4c
FUNCTION(A) BLOCK
4d
FUNCTION(B) BLOCK
4e
FUNCTION(C) BLOCK
INSPECTION RECEIVING CIRCUIT BASEBOARD
3
FIX-TURE SEC-TION
2
2a
FUNCTION(A) INSPECTION CIRCUIT (PLD)
2b
FUNCTION(B) INSPECTION CIRCUIT (PLD)
2c
FUNCTION(C) INSPECTION CIRCUIT (PLD)
INSPECTION CIRCUIT SECTION
1g
18
ID INFORMA-TION READING SECTION
37
BASEBOARD CLASSIFICATION DETERMINING SECTION
35
ADDITIONAL PLD FILE SPECIFYING SECTION
34
LOADING FIN-ISHED PLD FILE DETERMINATION SECTION
33
LPG SUPER-VISORY SECTION
PLD LOAD SECTION
15g
11
PLD FILE SUPERVISORY & PROCESSING SECTION
12
PLD FILE BAND
13
CORRESPONDENCE GIVING SUPERVISORY & PROCESSING SECTION
14
CORRESPONDENT TABLE
CONTROL SECTION

FIG. 33

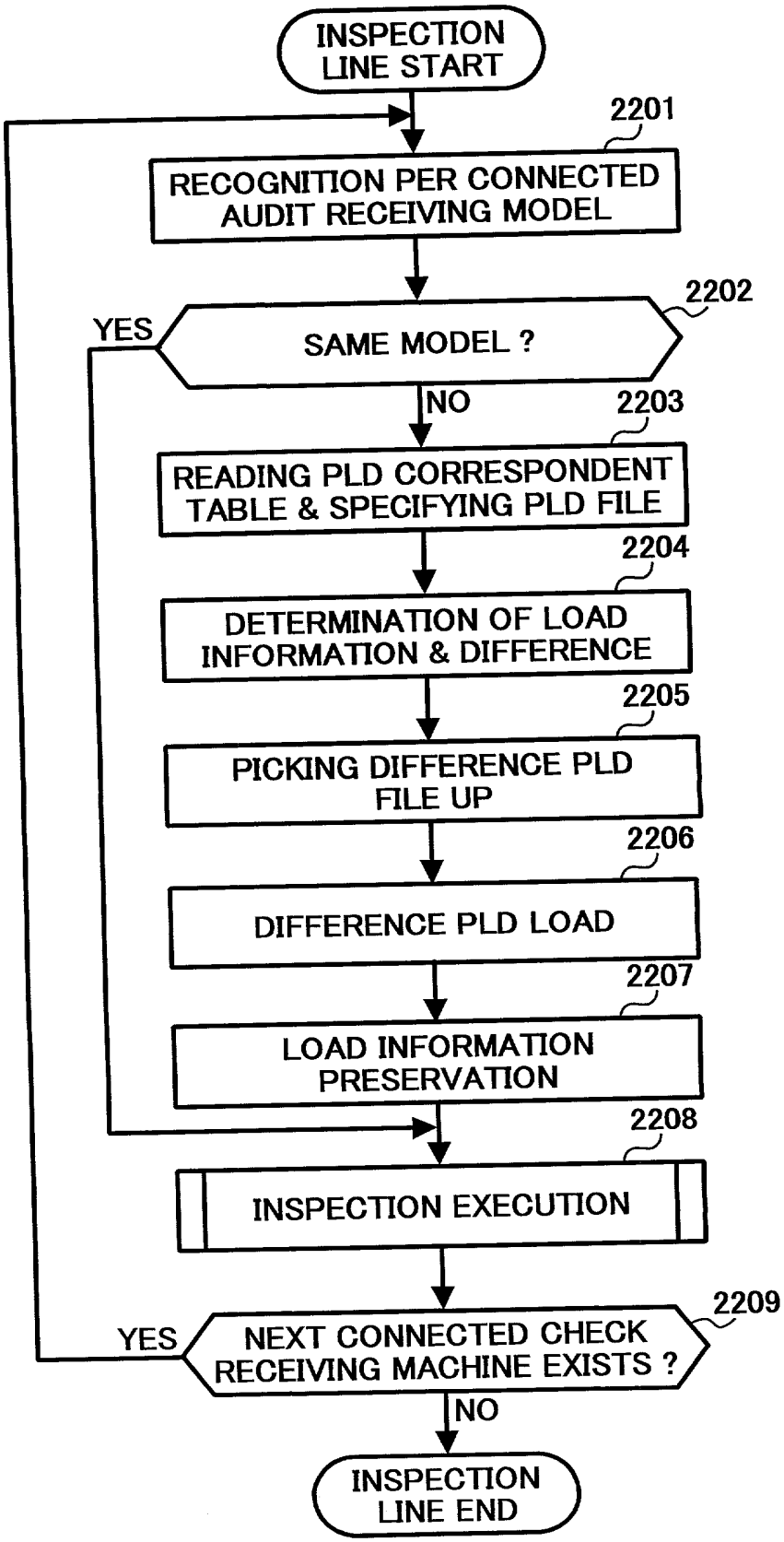

INSPECTION LINE START
2201
RECOGNITION PER CONNECTED AUDIT RECEIVING MODEL
2202
YES
SAME MODEL ?
NO
2203
READING PLD CORRESPONDENT TABLE & SPECIFYING PLD FILE
2204
DETERMINATION OF LOAD INFORMATION & DIFFERENCE
2205
PICKING DIFFERENCE PLD FILE UP
2206
DIFFERENCE PLD LOAD
2207
LOAD INFORMATION PRESERVATION
2208
INSPECTION EXECUTION
2209
YES
NEXT CONNECTED CHECK RECEIVING MACHINE EXISTS ?
NO
INSPECTION LINE END

FIG. 34

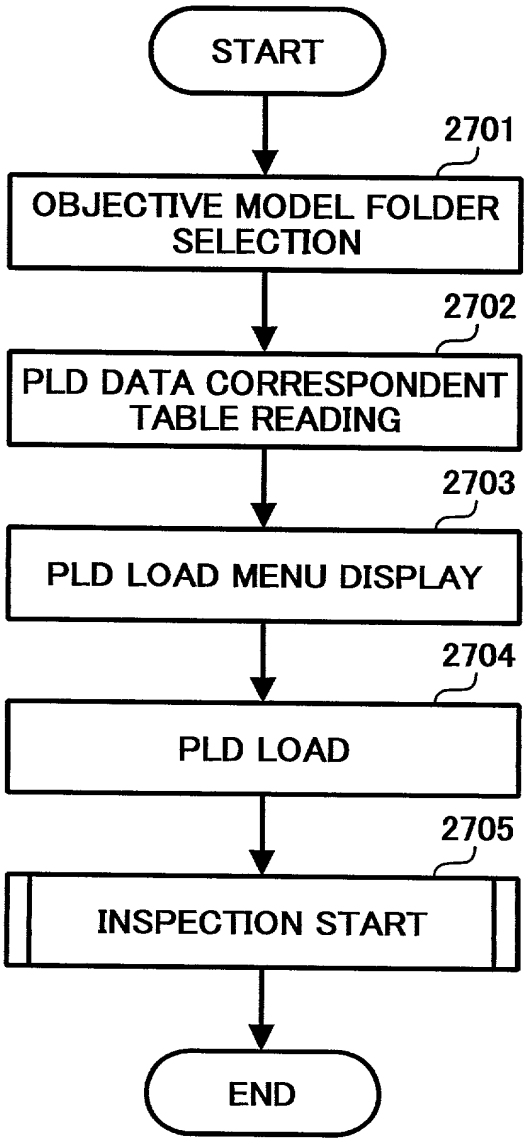

START
2701
OBJECTIVE MODEL FOLDER SELECTION
2702
PLD DATA CORRESPONDENT TABLE READING
2703
PLD LOAD MENU DISPLAY
2704
PLD LOAD
2705
INSPECTION START
END

FIG. 35

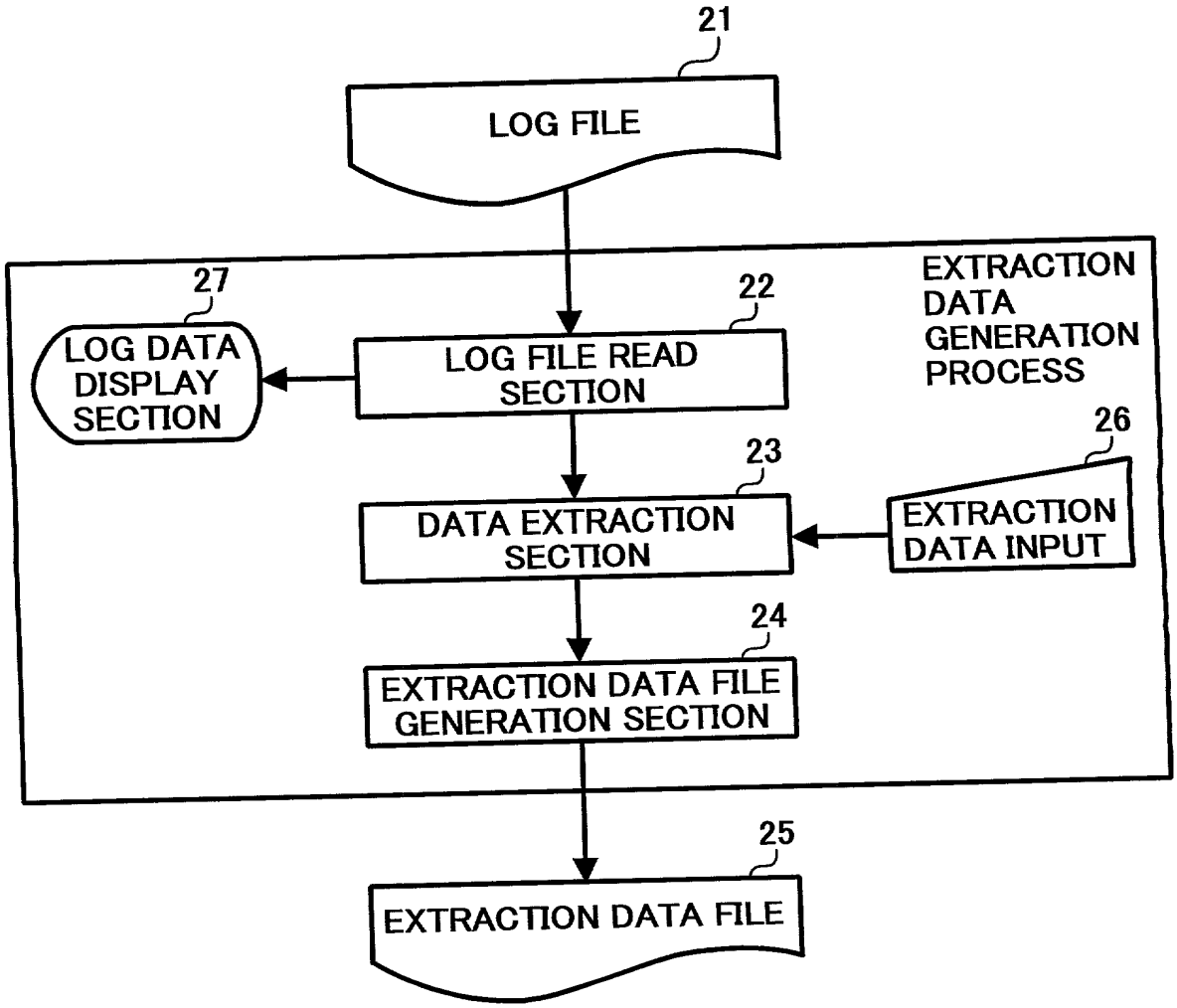

21
LOG FILE
EXTRACTION DATA GENERATION PROCESS
27
LOG DATA DISPLAY SECTION
22
LOG FILE READ SECTION
26
23
DATA EXTRACTION SECTION
EXTRACTION DATA INPUT
24
EXTRACTION DATA FILE GENERATION SECTION
25
EXTRACTION DATA FILE

FIG. 36

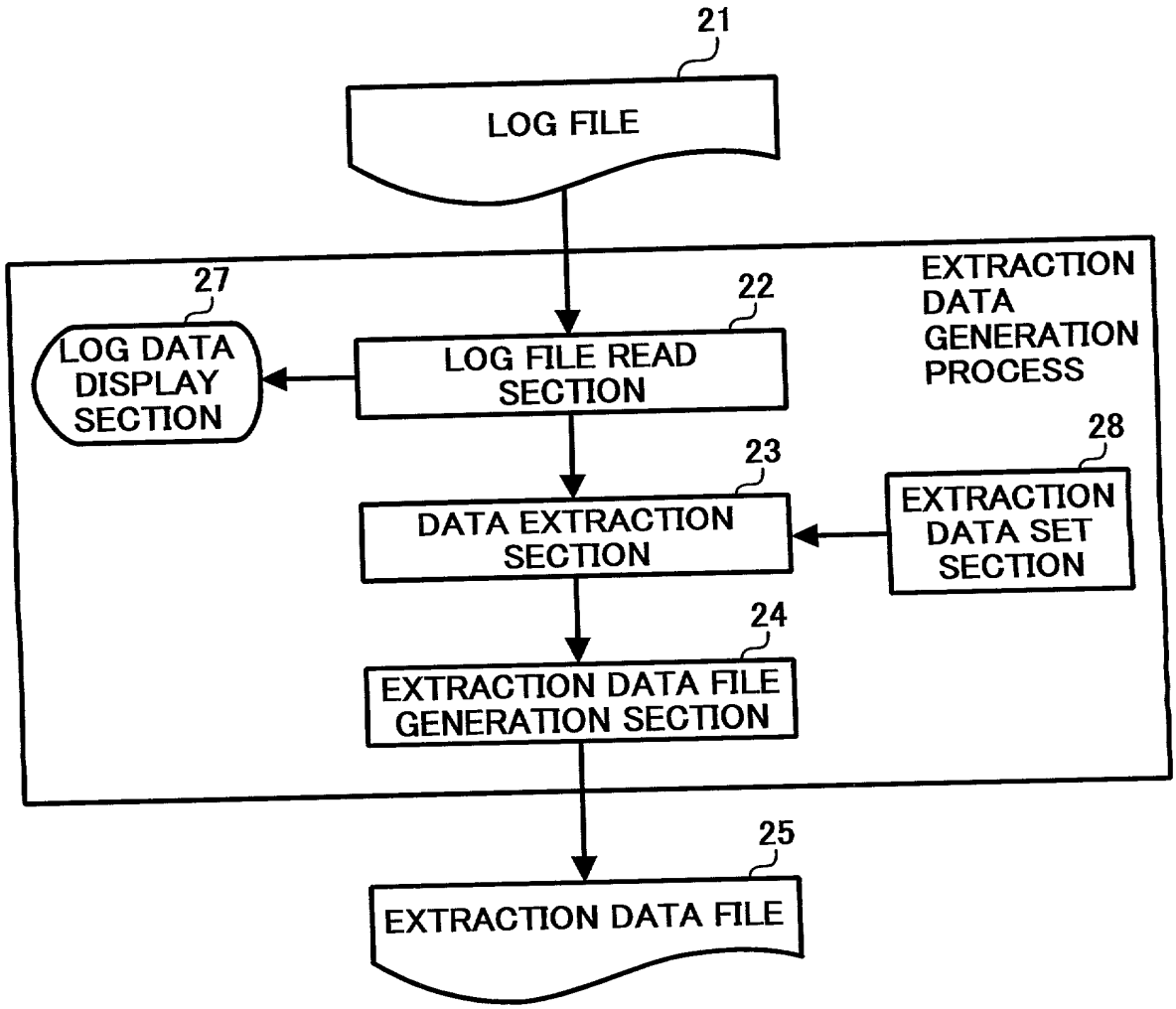

21
LOG FILE
EXTRACTION DATA GENERATION PROCESS
27
LOG DATA DISPLAY SECTION
22
LOG FILE READ SECTION
28
EXTRACTION DATA SET SECTION
23
DATA EXTRACTION SECTION
24
EXTRACTION DATA FILE GENERATION SECTION
25
EXTRACTION DATA FILE

FIG. 37

FIG. 37A
FIG. 37B

FIG. 37A

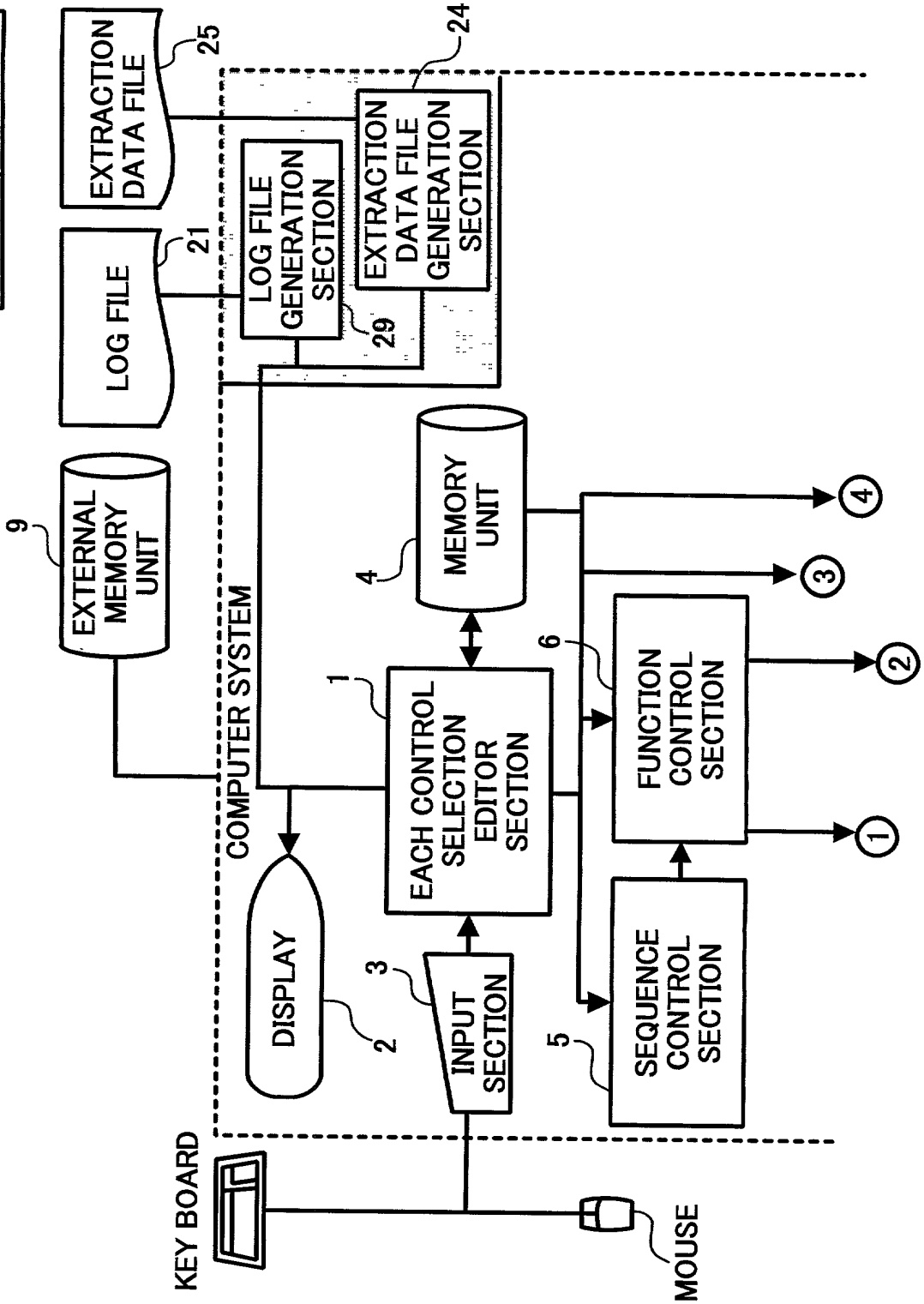


FIG. 37B

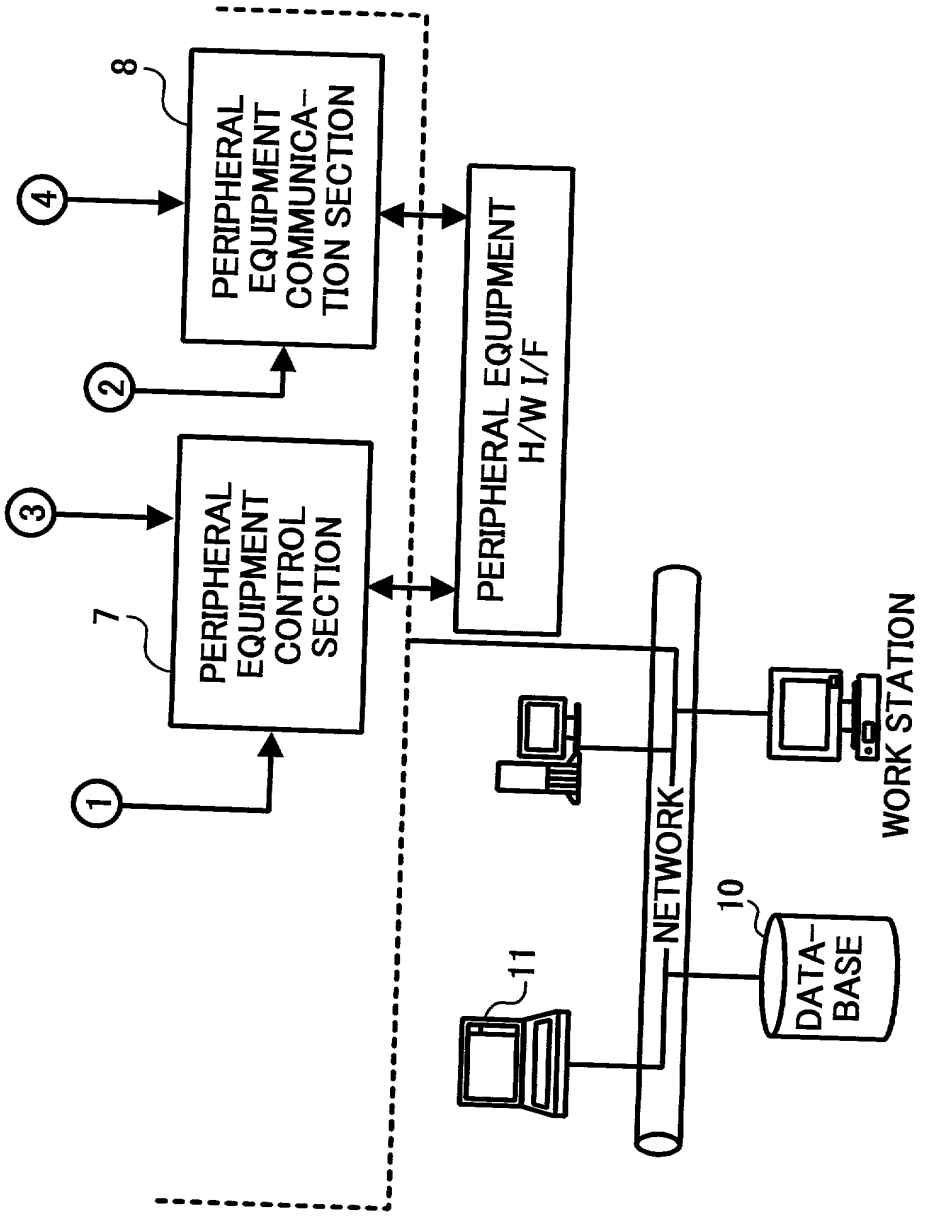

PERIPHERAL EQUIPMENT COMMUNICATION SECTION
8
PERIPHERAL EQUIPMENT CONTROL SECTION
7
PERIPHERAL EQUIPMENT H/W I/F
NETWORK
WORK STATION
DATA-BASE
10
11
1
2
3
4

FIG. 38

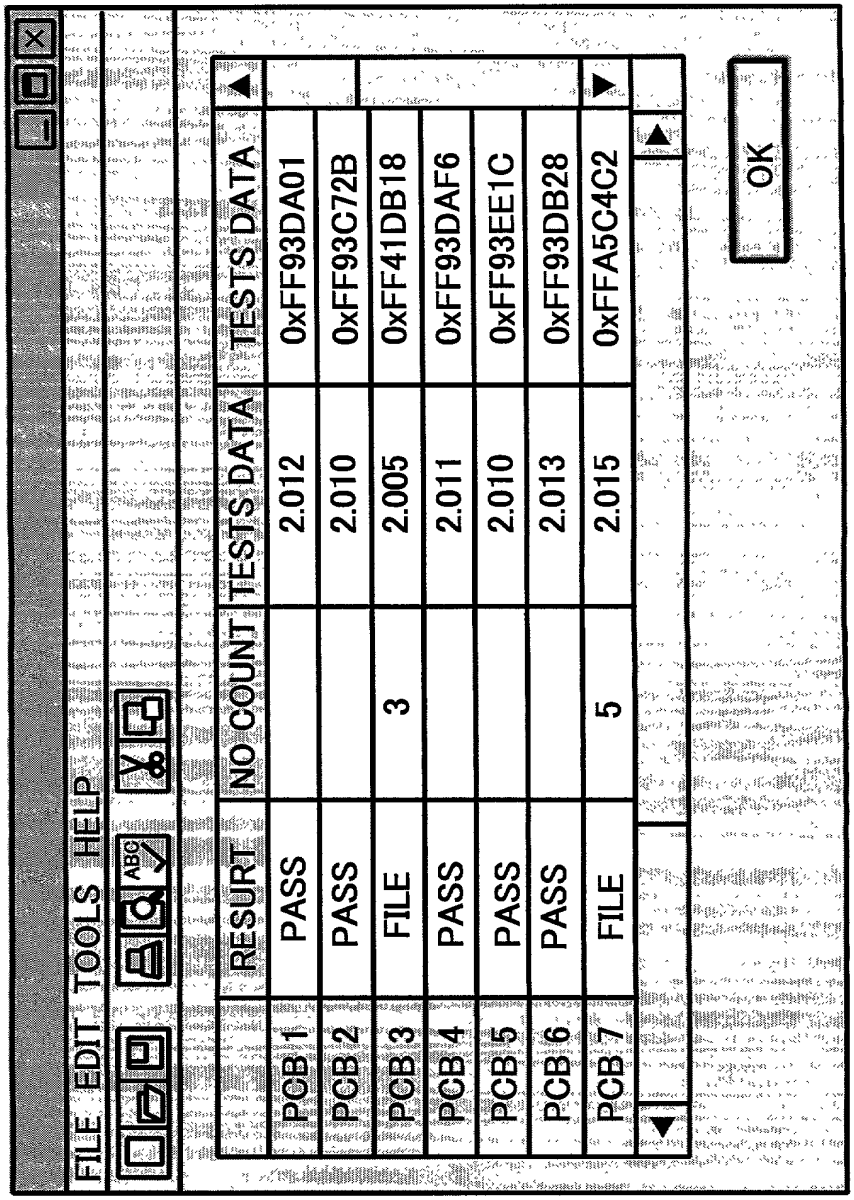

FILE EDIT TOOLS HELP
RESURT
NO COUNT
TESTS DATA
TESTS DATA
PCB 1
PASS
2.012
0xFF93DA01
PCB 2
PASS
2.010
0xFF93C72B
PCB 3
FILE
3
2.005
0xFF41DB18
PCB 4
PASS
2.011
0xFF93DAF6
PCB 5
PASS
2.010
0xFF93EE1C
PCB 6
PASS
2.013
0xFF93DB28
PCB 7
FILE
5
2.015
0xFFA5C4C2
OK

FIG. 39

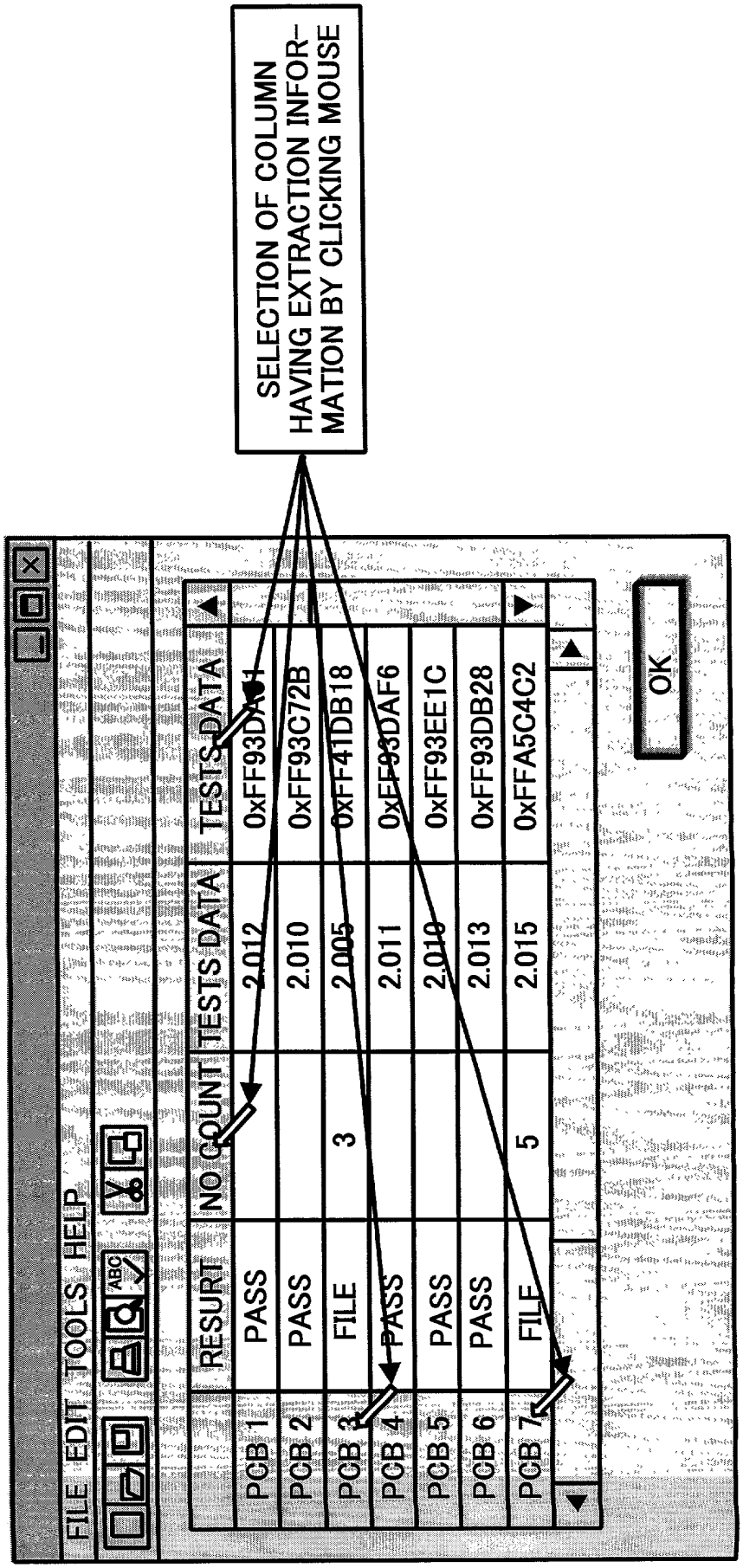

SELECTION OF COLUMN HAVING EXTRACTION INFORMATION BY CLICKING MOUSE
FILE EDIT TOOLS HELP
RESURT
NO COUNT
TESTS DATA
TESTS DATA
PCB 1
PASS
2.012
0xFF93DA11
PCB 2
PASS
2.010
0xFF93C72B
PCB 3
FILE
3
2.005
0xFF41DB18
PCB 4
PASS
2.011
0xFF93DAF6
PCB 5
PASS
2.010
0xFF93EE1C
PCB 6
PASS
2.013
0xFF93DB28
PCB 7
FILE
5
2.015
0xFFA5C4C2
OK

FIG. 40

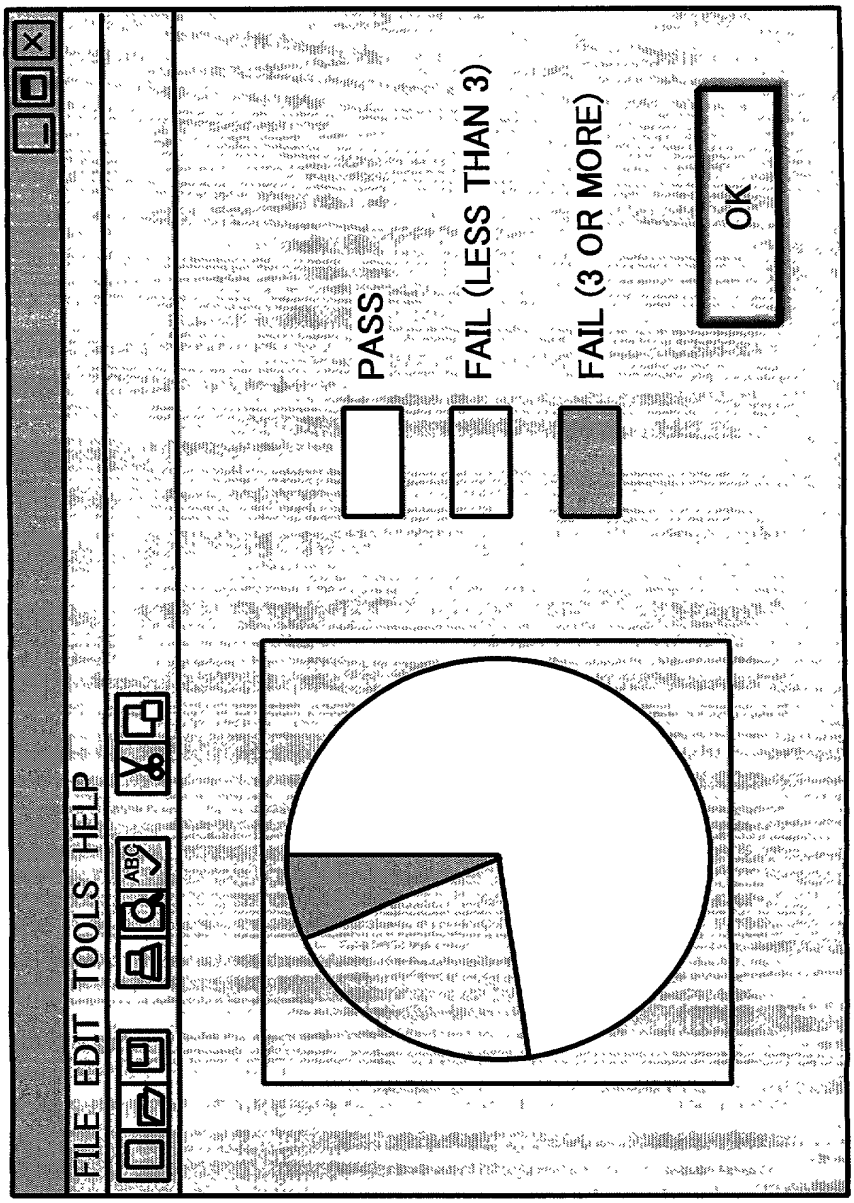


FIG. 41

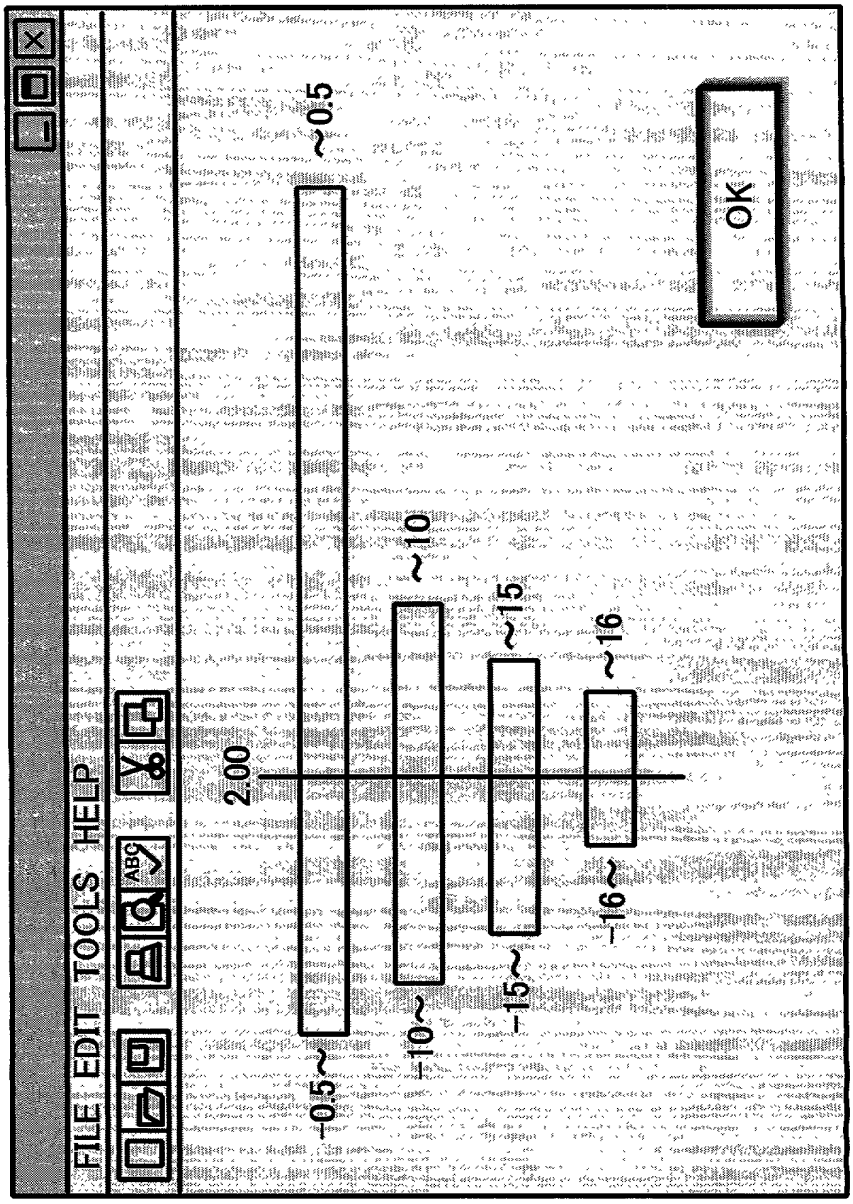


FIG. 42

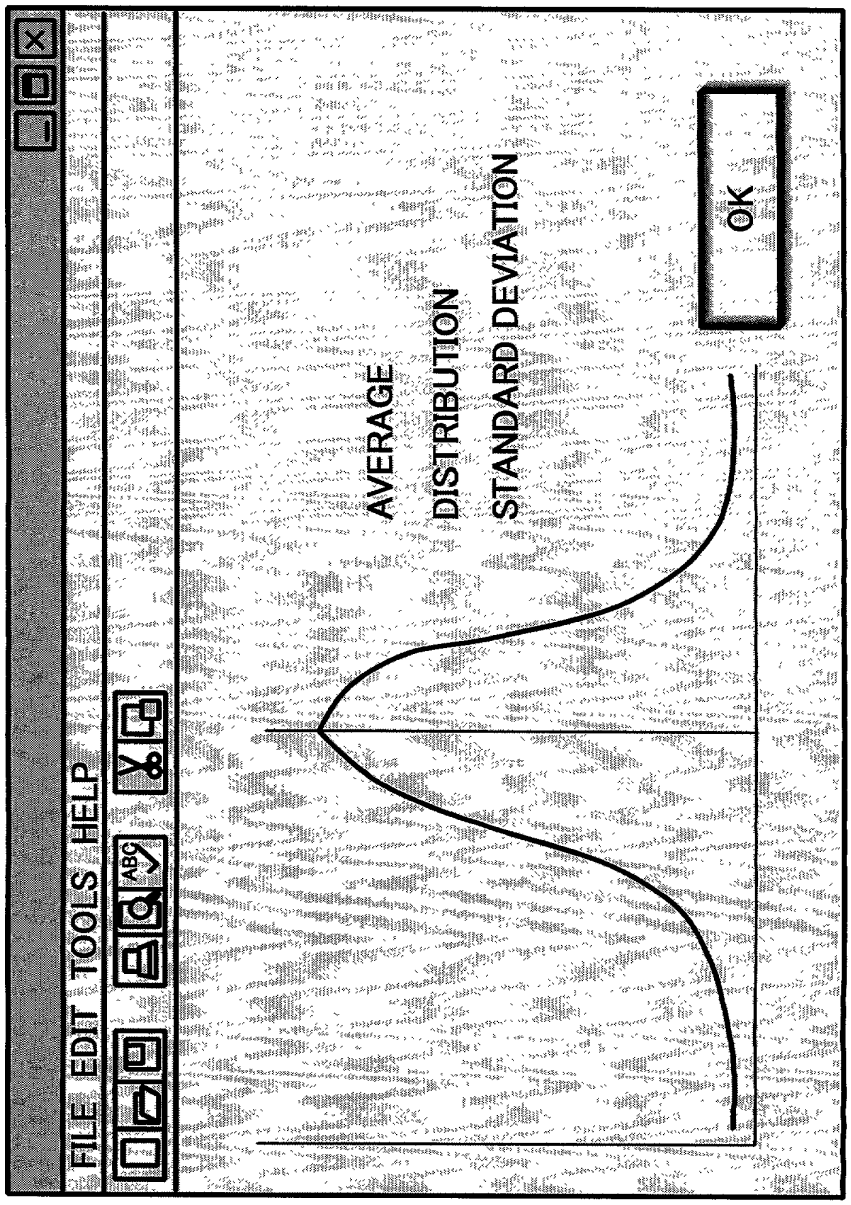

FILE EDIT TOOLS HELP
AVERAGE
DISTRIBUTION
STANDARD DEVIATION
OK

FIG. 43

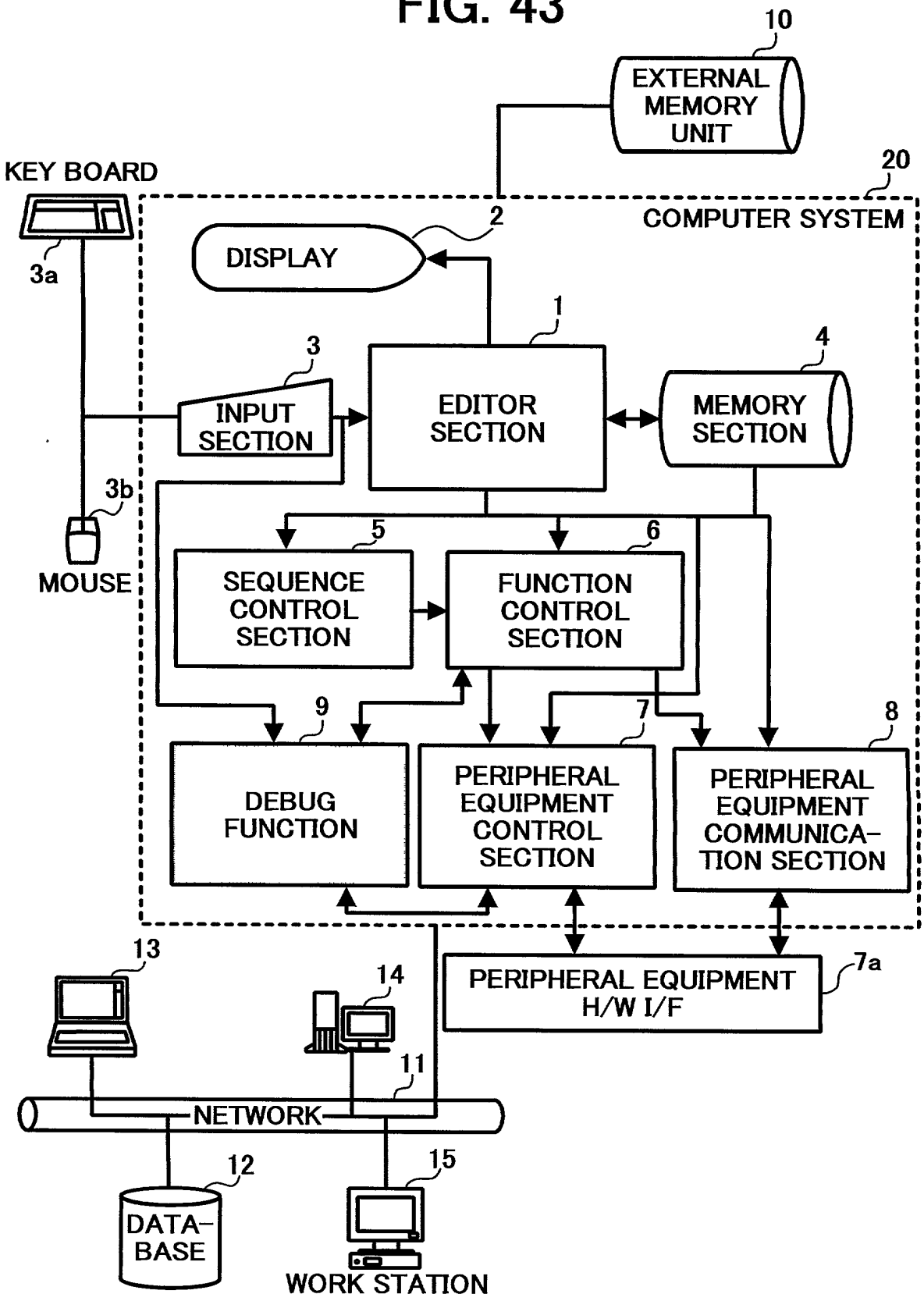

10
EXTERNAL MEMORY UNIT
KEY BOARD
20
COMPUTER SYSTEM
2
DISPLAY
3a
1
3
4
INPUT SECTION
EDITOR SECTION
MEMORY SECTION
3b
MOUSE
5
6
SEQUENCE CONTROL SECTION
FUNCTION CONTROL SECTION
9
7
8
DEBUG FUNCTION
PERIPHERAL EQUIPMENT CONTROL SECTION
PERIPHERAL EQUIPMENT COMMUNICA-TION SECTION
13
14
PERIPHERAL EQUIPMENT H/W I/F
7a
11
NETWORK
12
15
DATA-BASE
WORK STATION

FIG. 44

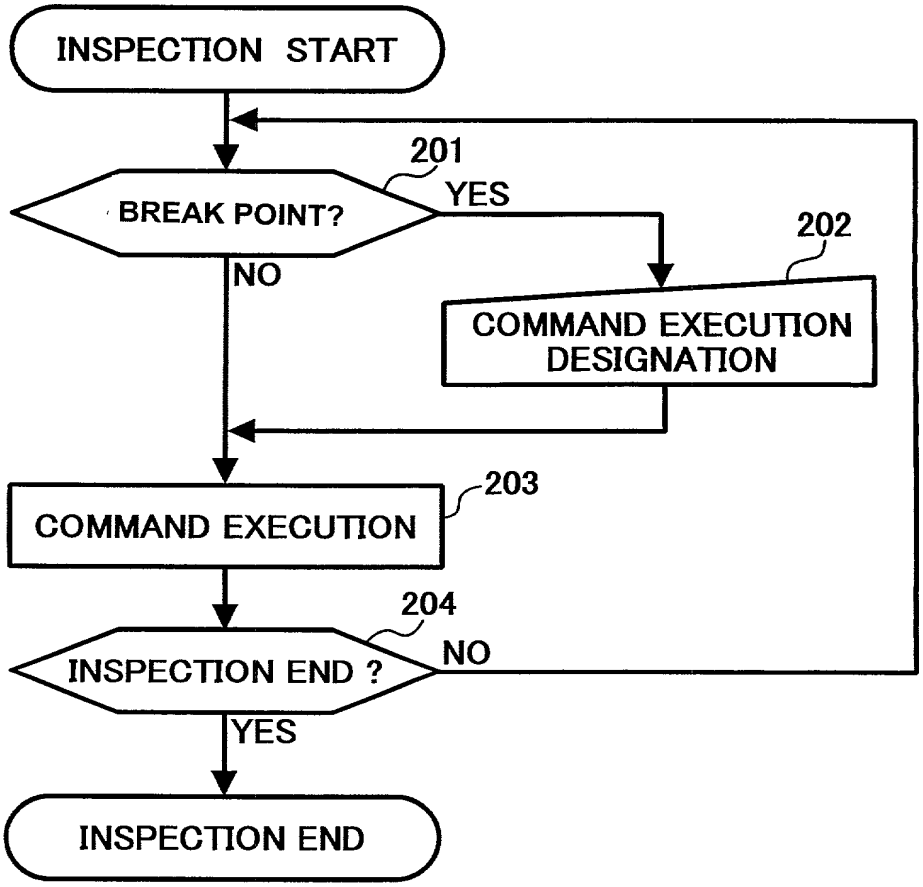

INSPECTION START
201
BREAK POINT?
YES
NO
202
COMMAND EXECUTION DESIGNATION
203
COMMAND EXECUTION
204
INSPECTION END ?
NO
YES
INSPECTION END

FIG. 45

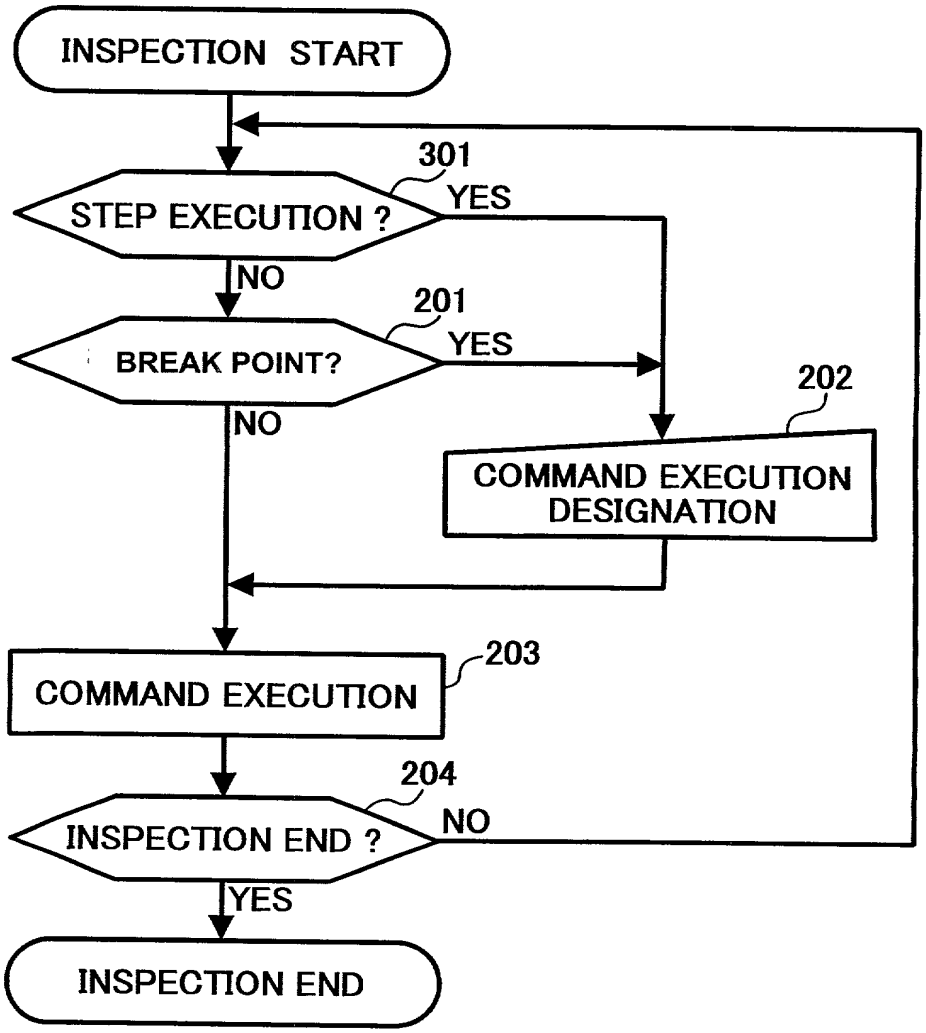

INSPECTION START
301
STEP EXECUTION ?
YES
NO
201
BREAK POINT?
YES
NO
202
COMMAND EXECUTION DESIGNATION
COMMAND EXECUTION
203
204
INSPECTION END ?
NO
YES
INSPECTION END

FIG. 46

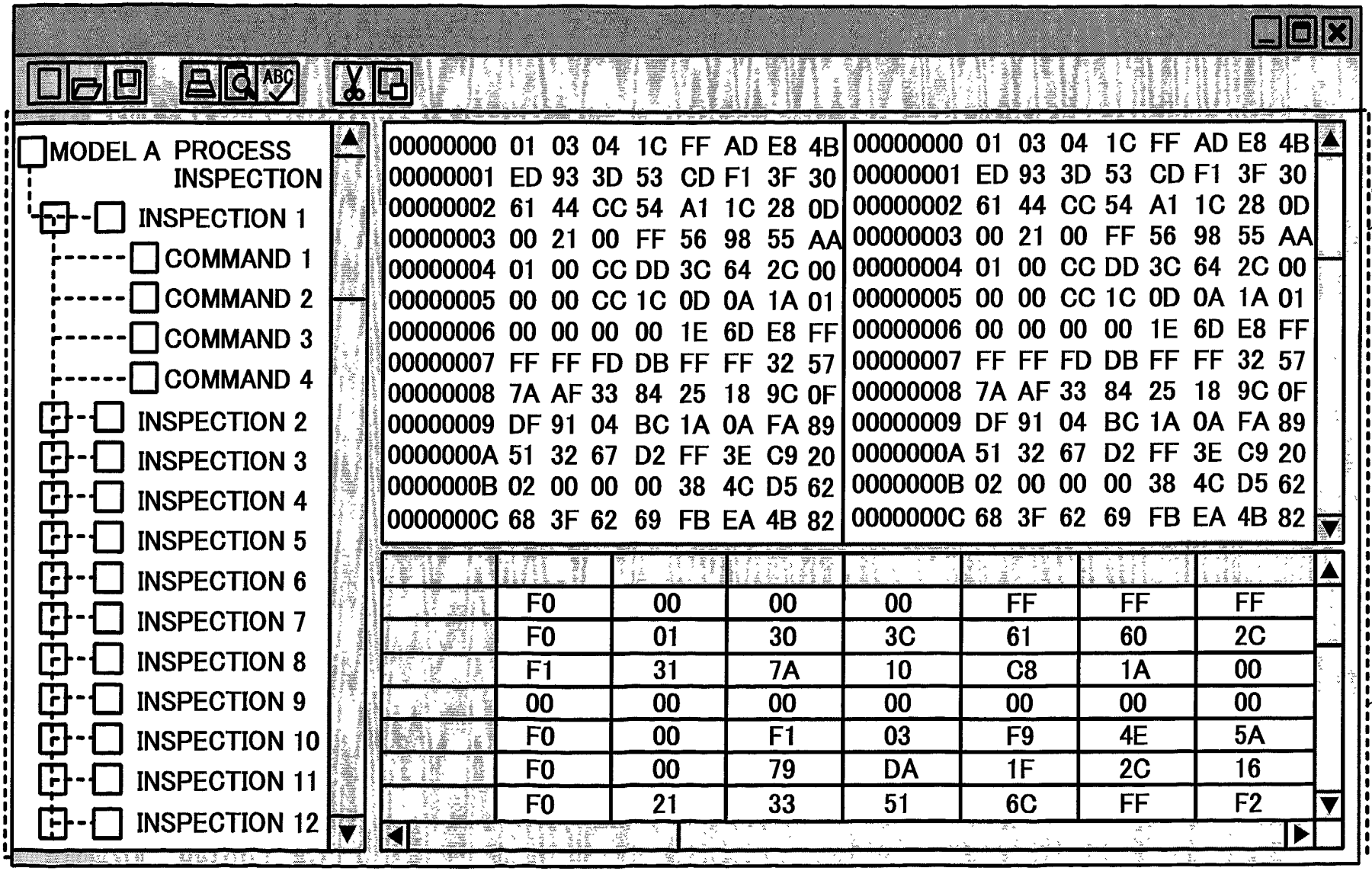


FIG. 47

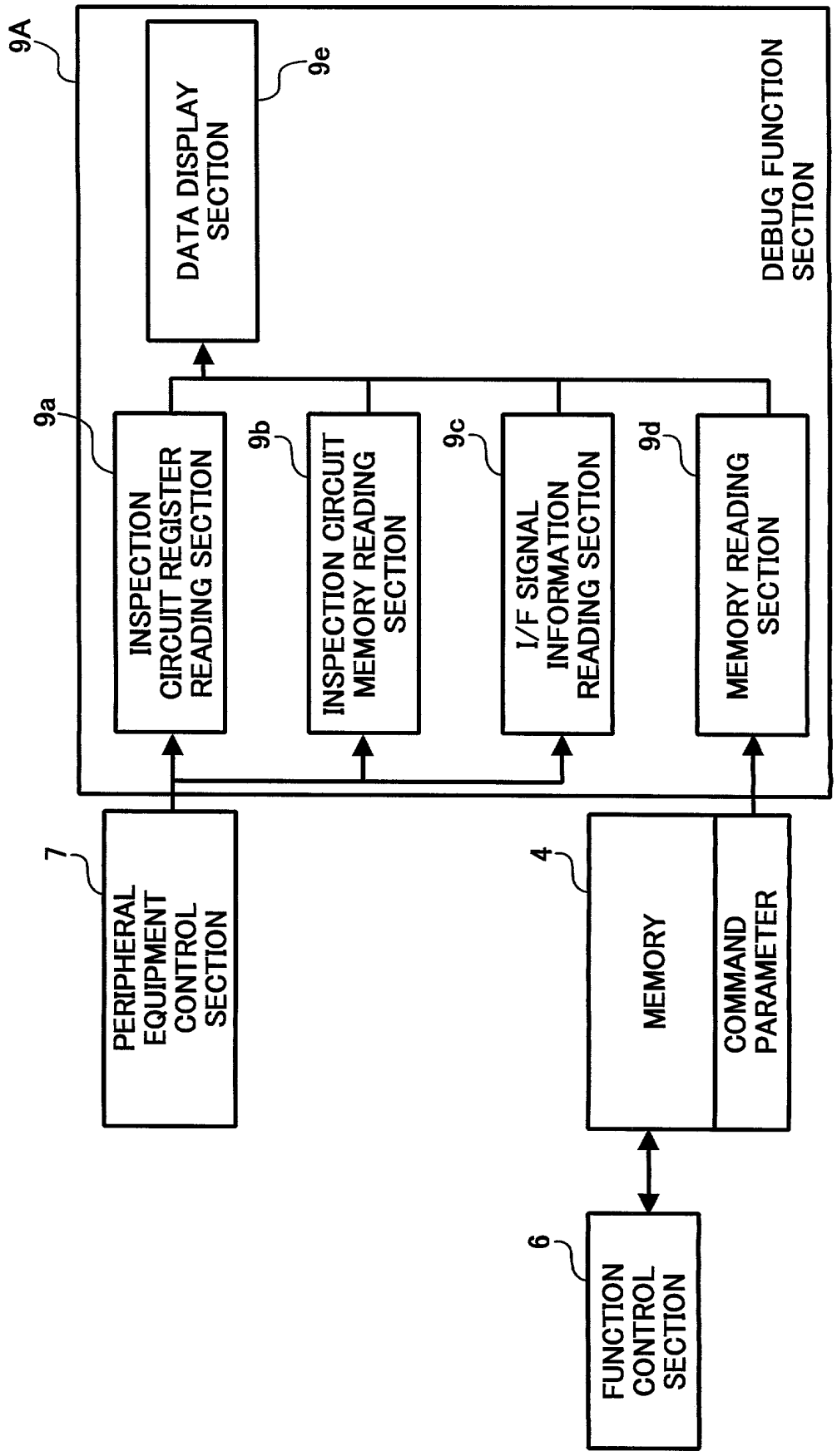

9A
DEBUG FUNCTION SECTION
DATA DISPLAY SECTION
9e
9a
INSPECTION CIRCUIT REGISTER READING SECTION
9b
INSPECTION CIRCUIT MEMORY READING SECTION
9c
I/F SIGNAL INFORMATION READING SECTION
9d
MEMORY READING SECTION
7
PERIPHERAL EQUIPMENT CONTROL SECTION
4
MEMORY
COMMAND PARAMETER
6
FUNCTION CONTROL SECTION

FIG. 48

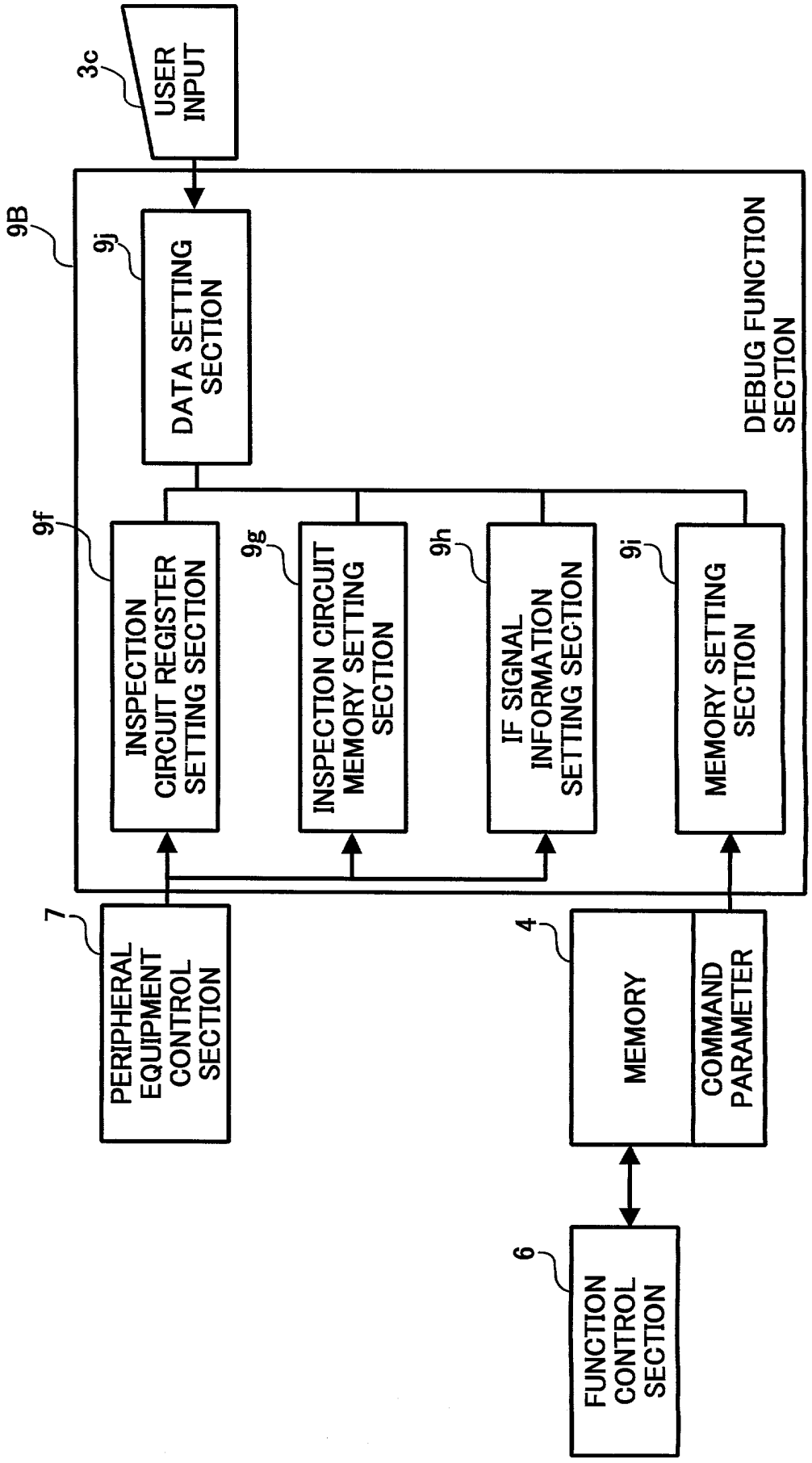

3c
USER INPUT
9B
9j
DATA SETTING SECTION
DEBUG FUNCTION SECTION
9f
INSPECTION CIRCUIT REGISTER SETTING SECTION
9g
INSPECTION CIRCUIT MEMORY SETTING SECTION
9h
IF SIGNAL INFORMATION SETTING SECTION
9i
MEMORY SETTING SECTION
7
PERIPHERAL EQUIPMENT CONTROL SECTION
4
MEMORY
COMMAND PARAMETER
6
FUNCTION CONTROL SECTION

FIG. 49

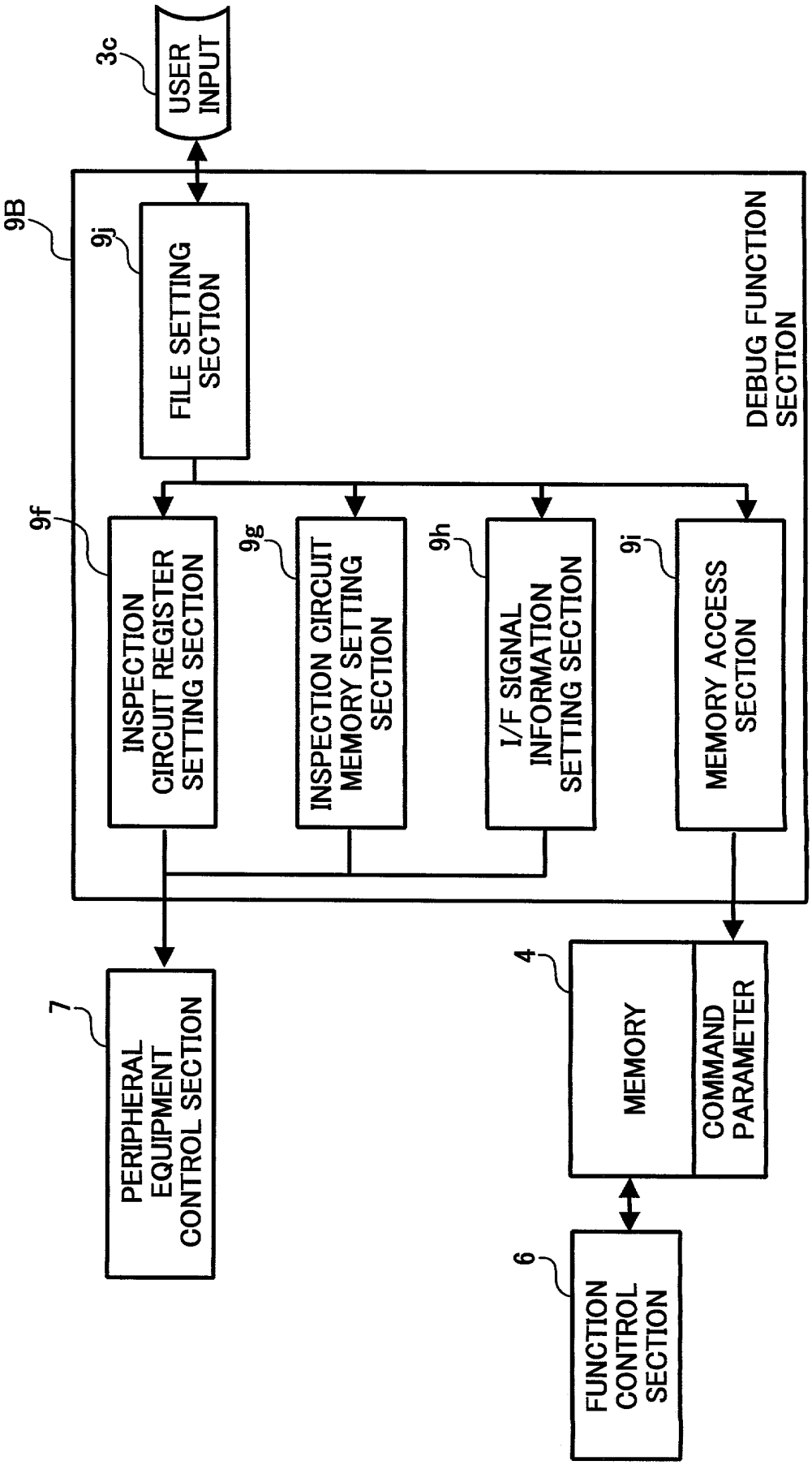

3c
USER INPUT
9B
9j
FILE SETTING SECTION
DEBUG FUNCTION SECTION
9f
INSPECTION CIRCUIT REGISTER SETTING SECTION
9g
INSPECTION CIRCUIT MEMORY SETTING SECTION
9h
I/F SIGNAL INFORMATION SETTING SECTION
9i
MEMORY ACCESS SECTION
7
PERIPHERAL EQUIPMENT CONTROL SECTION
4
MEMORY
COMMAND PARAMETER
6
FUNCTION CONTROL SECTION

FIG. 50

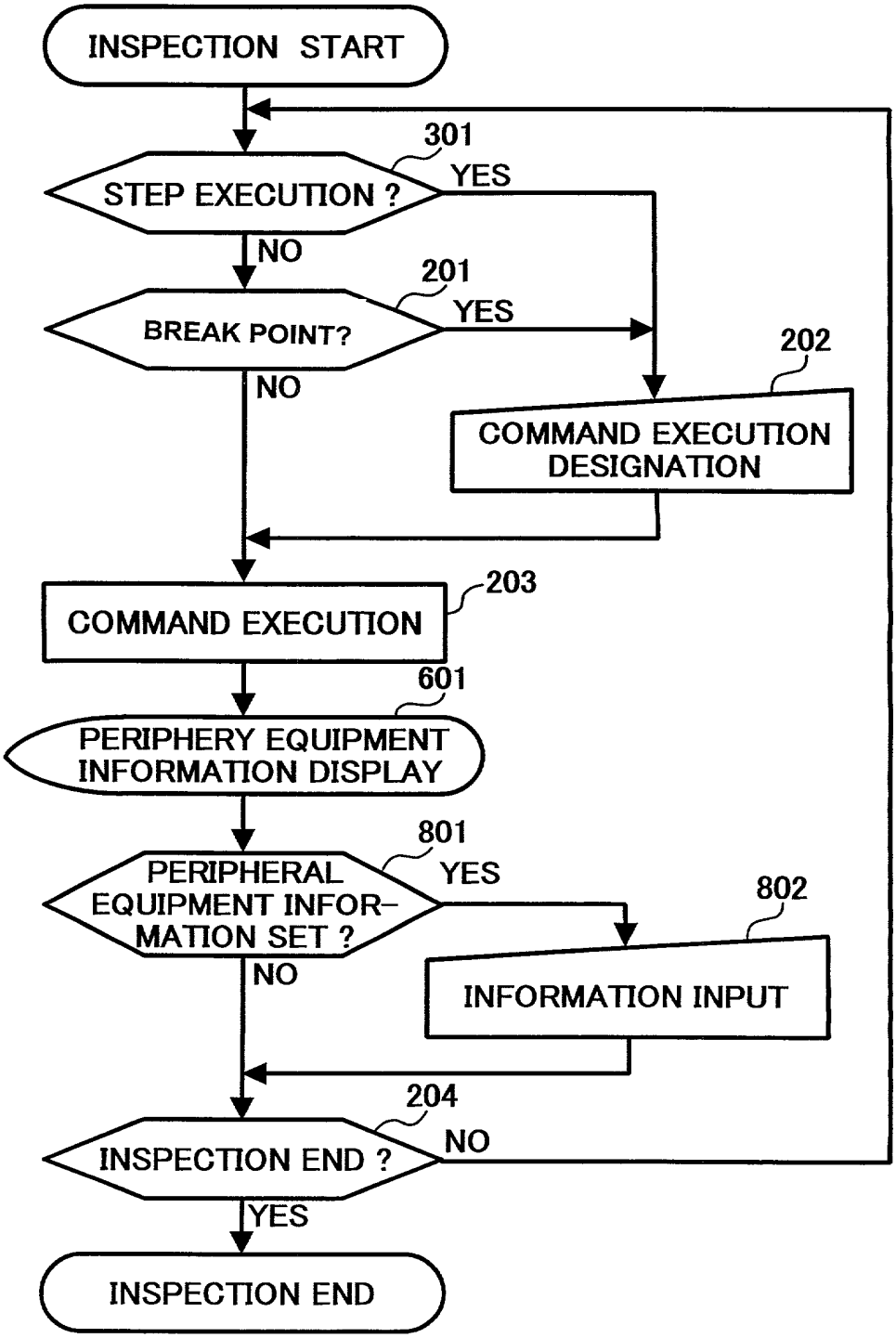

INSPECTION START
301
STEP EXECUTION ?
YES
NO
201
BREAK POINT?
YES
NO
202
COMMAND EXECUTION DESIGNATION
COMMAND EXECUTION
203
601
PERIPHERY EQUIPMENT INFORMATION DISPLAY
801
PERIPHERAL EQUIPMENT INFOR-MATION SET ?
YES
NO
802
INFORMATION INPUT
204
INSPECTION END ?
NO
YES
INSPECTION END

FIG. 51

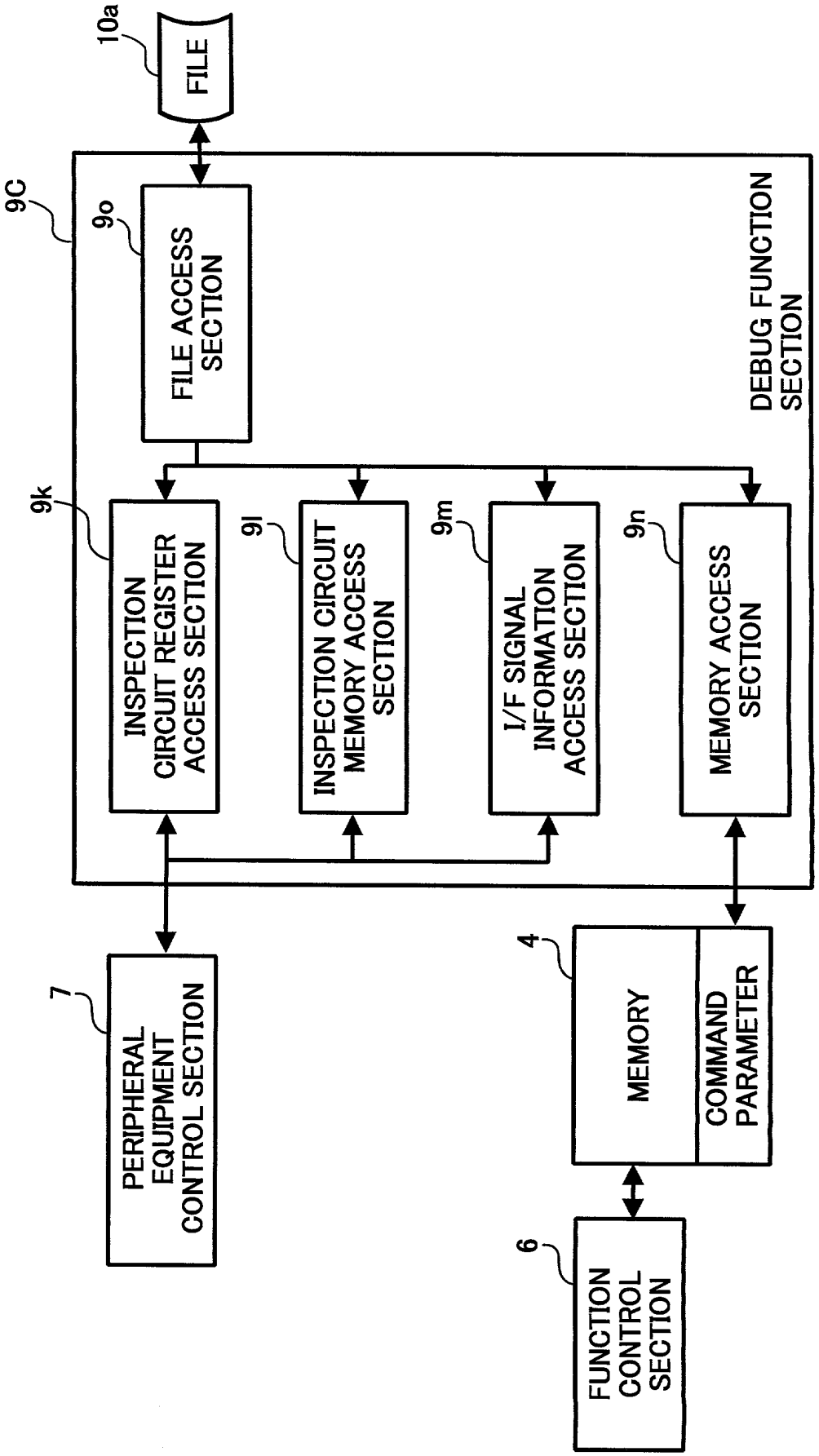

10a
FILE
9C
9o
FILE ACCESS SECTION
DEBUG FUNCTION SECTION
9k
INSPECTION CIRCUIT REGISTER ACCESS SECTION
9l
INSPECTION CIRCUIT MEMORY ACCESS SECTION
9m
I/F SIGNAL INFORMATION ACCESS SECTION
9n
MEMORY ACCESS SECTION
7
PERIPHERAL EQUIPMENT CONTROL SECTION
4
MEMORY
COMMAND PARAMETER
6
FUNCTION CONTROL SECTION

FIG. 52

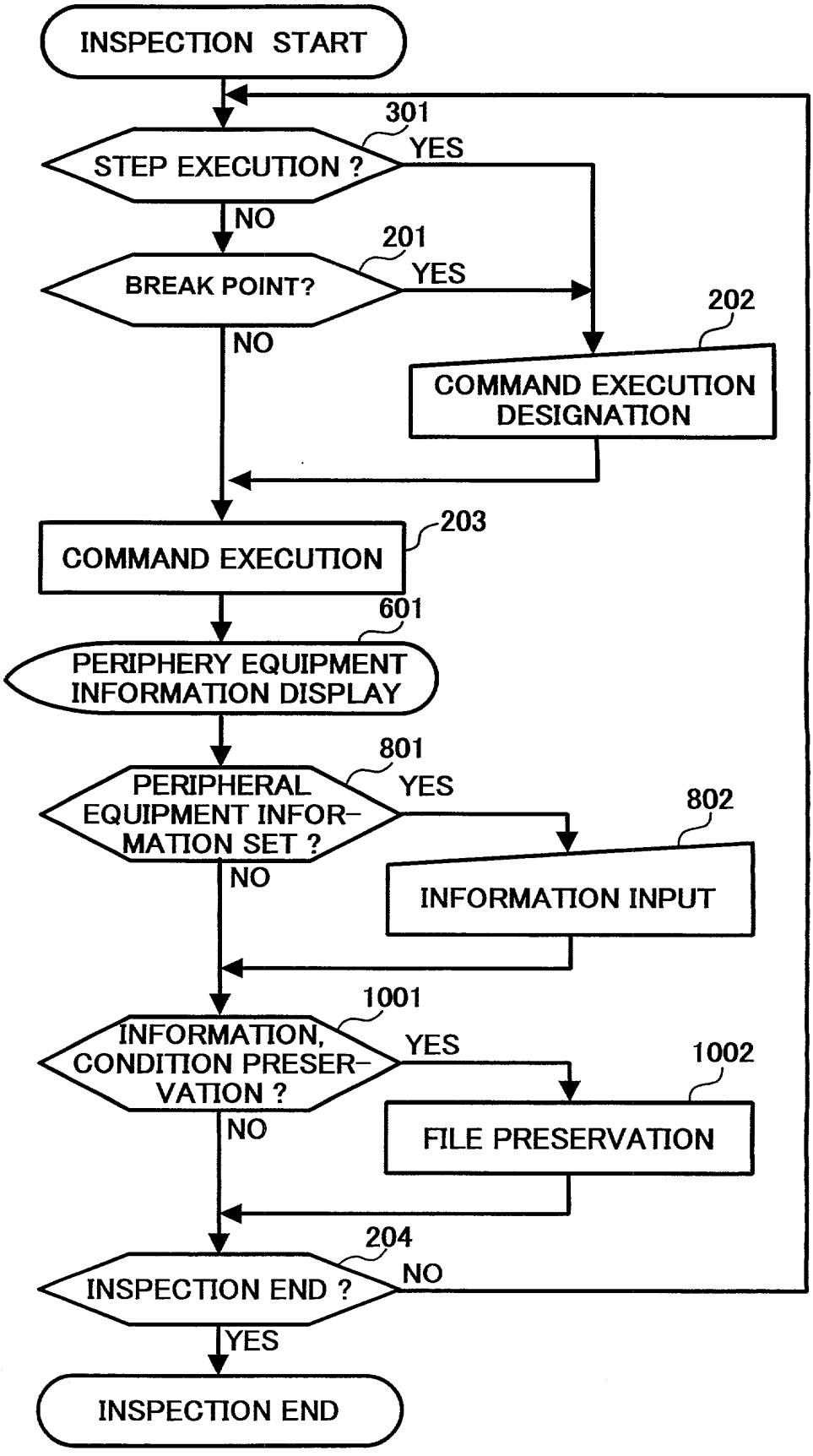

INSPECTION START
301
STEP EXECUTION ?
YES
NO
201
BREAK POINT?
YES
NO
202
COMMAND EXECUTION DESIGNATION
COMMAND EXECUTION
203
601
PERIPHERY EQUIPMENT INFORMATION DISPLAY
801
PERIPHERAL EQUIPMENT INFOR-MATION SET ?
YES
NO
802
INFORMATION INPUT
1001
INFORMATION, CONDITION PRESER-VATION ?
YES
NO
1002
FILE PRESERVATION
204
INSPECTION END ?
NO
YES
INSPECTION END

FIG. 53A

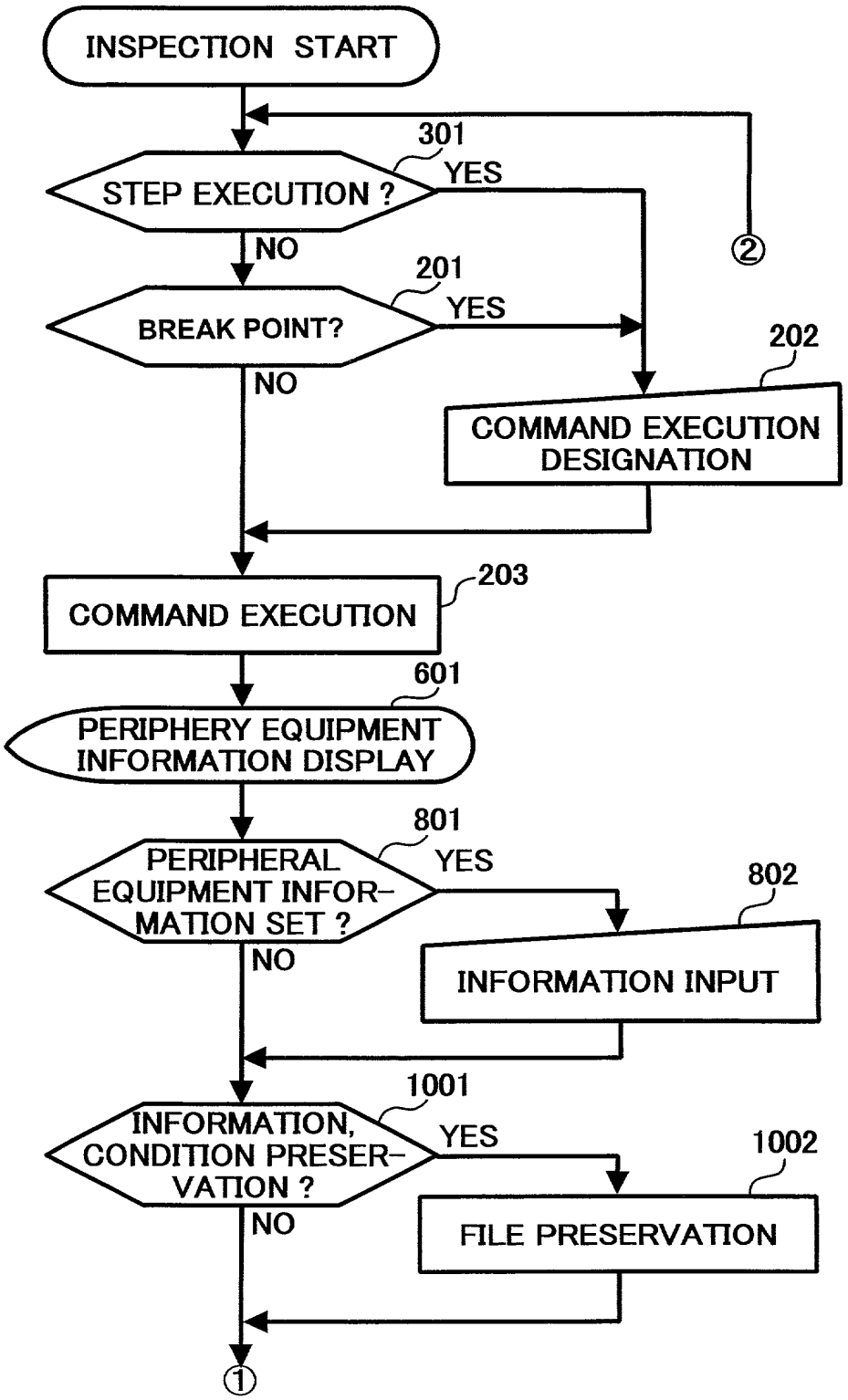

INSPECTION START
301
STEP EXECUTION ?
YES
NO
201
BREAK POINT?
YES
NO
202
COMMAND EXECUTION DESIGNATION
②
COMMAND EXECUTION
203
601
PERIPHERY EQUIPMENT INFORMATION DISPLAY
801
PERIPHERAL EQUIPMENT INFOR-MATION SET ?
YES
NO
802
INFORMATION INPUT
1001
INFORMATION, CONDITION PRESER-VATION ?
YES
NO
1002
FILE PRESERVATION
①

FIG. 53B

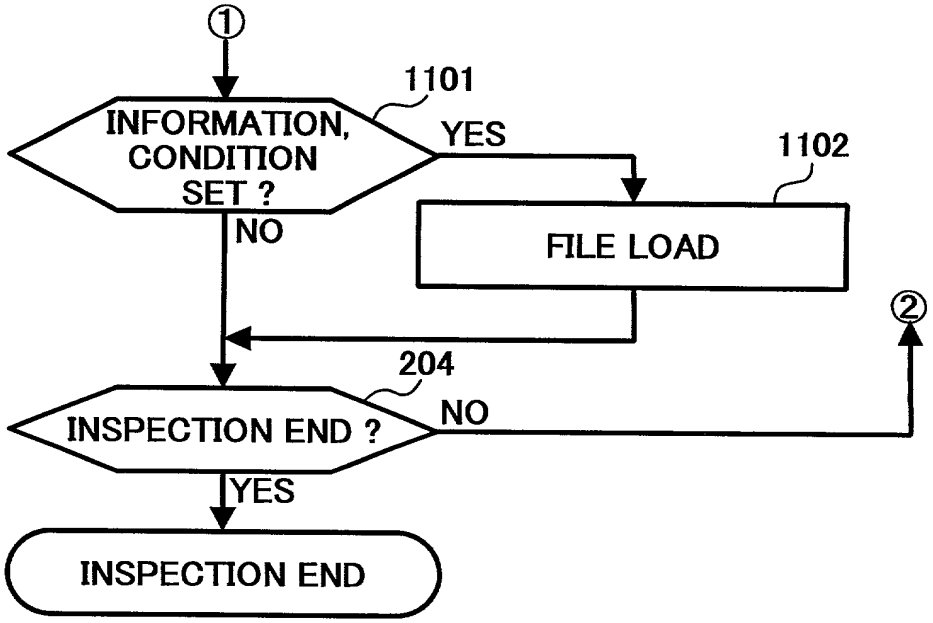

①
1101
INFORMATION, CONDITION SET ?
YES
1102
NO
FILE LOAD
②
204
INSPECTION END ?
NO
YES
INSPECTION END

FIG. 54

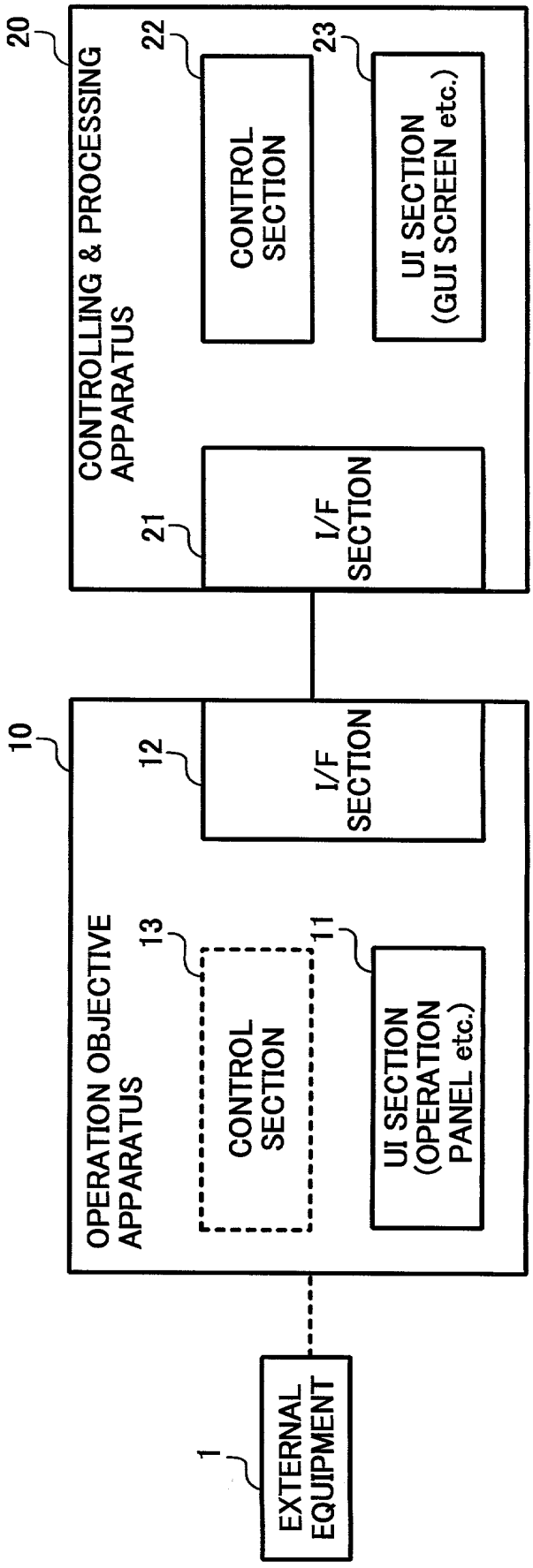

EXTERNAL EQUIPMENT
1
OPERATION OBJECTIVE APPARATUS
10
CONTROL SECTION
13
UI SECTION (OPERATION PANEL etc.)
11
I/F SECTION
12
CONTROLLING & PROCESSING APPARATUS
20
I/F SECTION
21
CONTROL SECTION
22
UI SECTION (GUI SCREEN etc.)
23

FIG. 55A

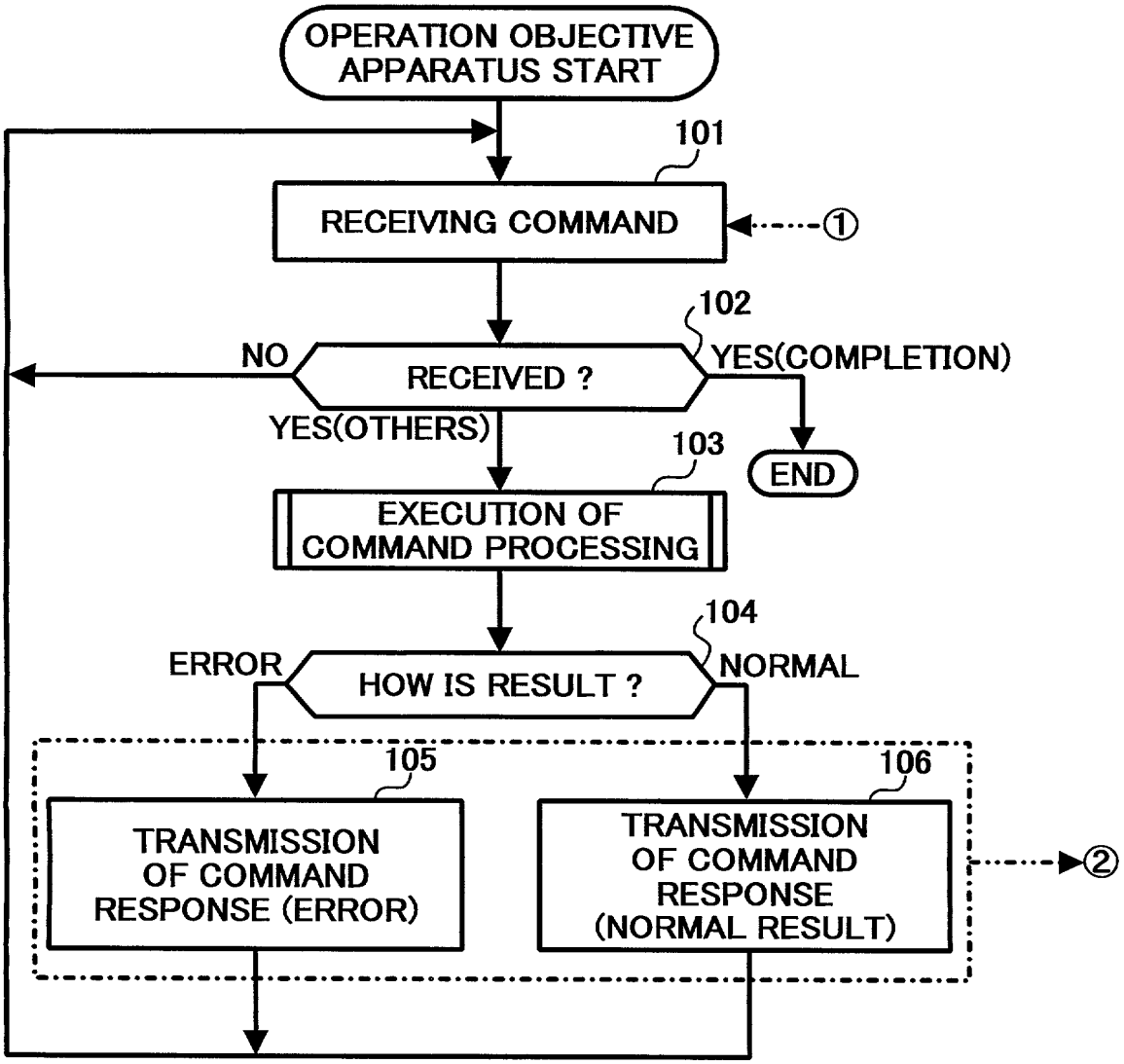

OPERATION OBJECTIVE APPARATUS START
101
RECEIVING COMMAND
①
102
NO
RECEIVED ?
YES(COMPLETION)
YES(OTHERS)
103
END
EXECUTION OF COMMAND PROCESSING
104
ERROR
HOW IS RESULT ?
NORMAL
105
106
TRANSMISSION OF COMMAND RESPONSE (ERROR)
TRANSMISSION OF COMMAND RESPONSE (NORMAL RESULT)
②

FIG. 55B

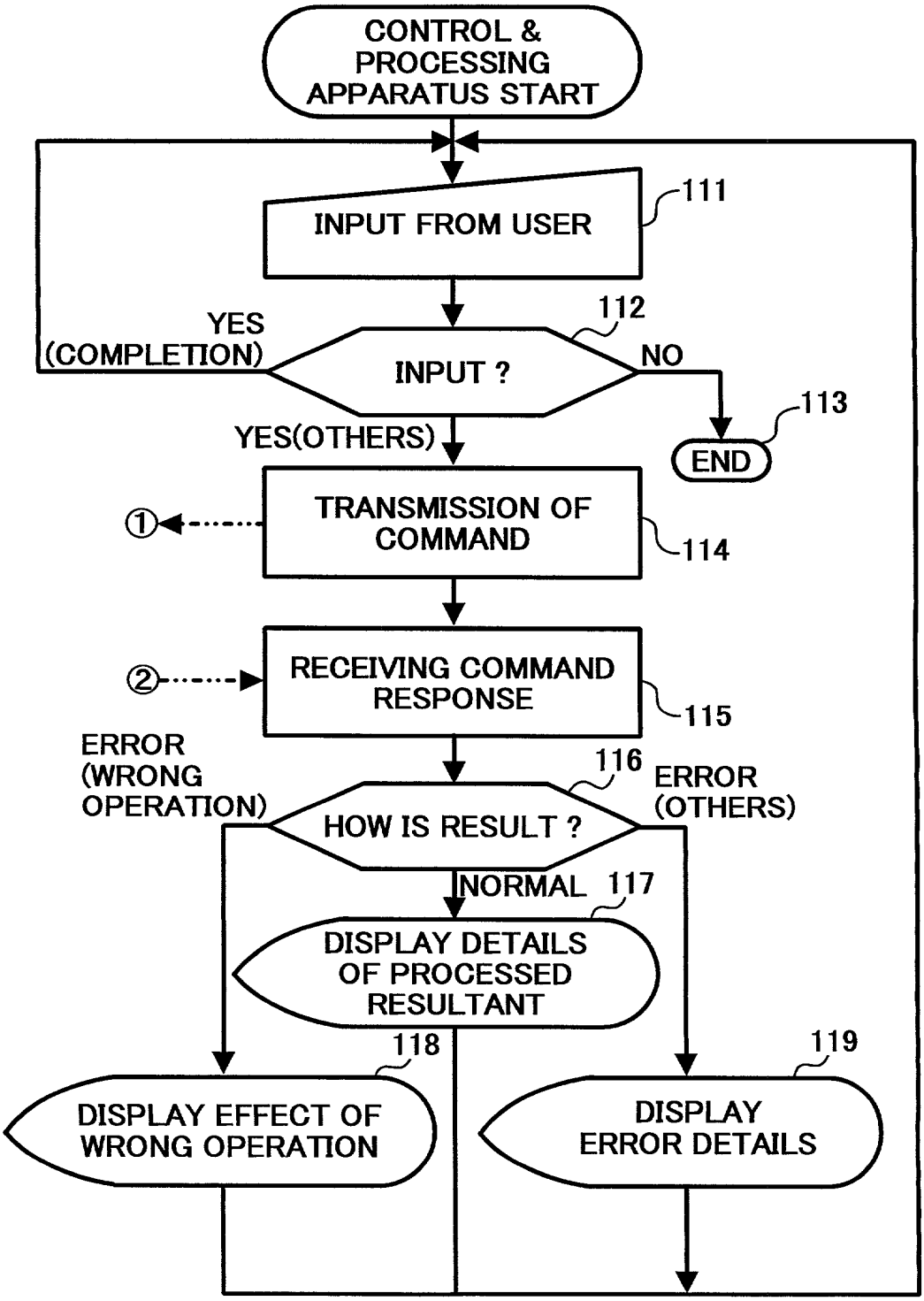

CONTROL & PROCESSING APPARATUS START
INPUT FROM USER
111
INPUT ?
112
YES (COMPLETION)
NO
END
113
YES(OTHERS)
TRANSMISSION OF COMMAND
114
①
RECEIVING COMMAND RESPONSE
115
②
ERROR (WRONG OPERATION)
HOW IS RESULT ?
116
ERROR (OTHERS)
NORMAL
117
DISPLAY DETAILS OF PROCESSED RESULTANT
118
DISPLAY EFFECT OF WRONG OPERATION
119
DISPLAY ERROR DETAILS

FIG. 56A

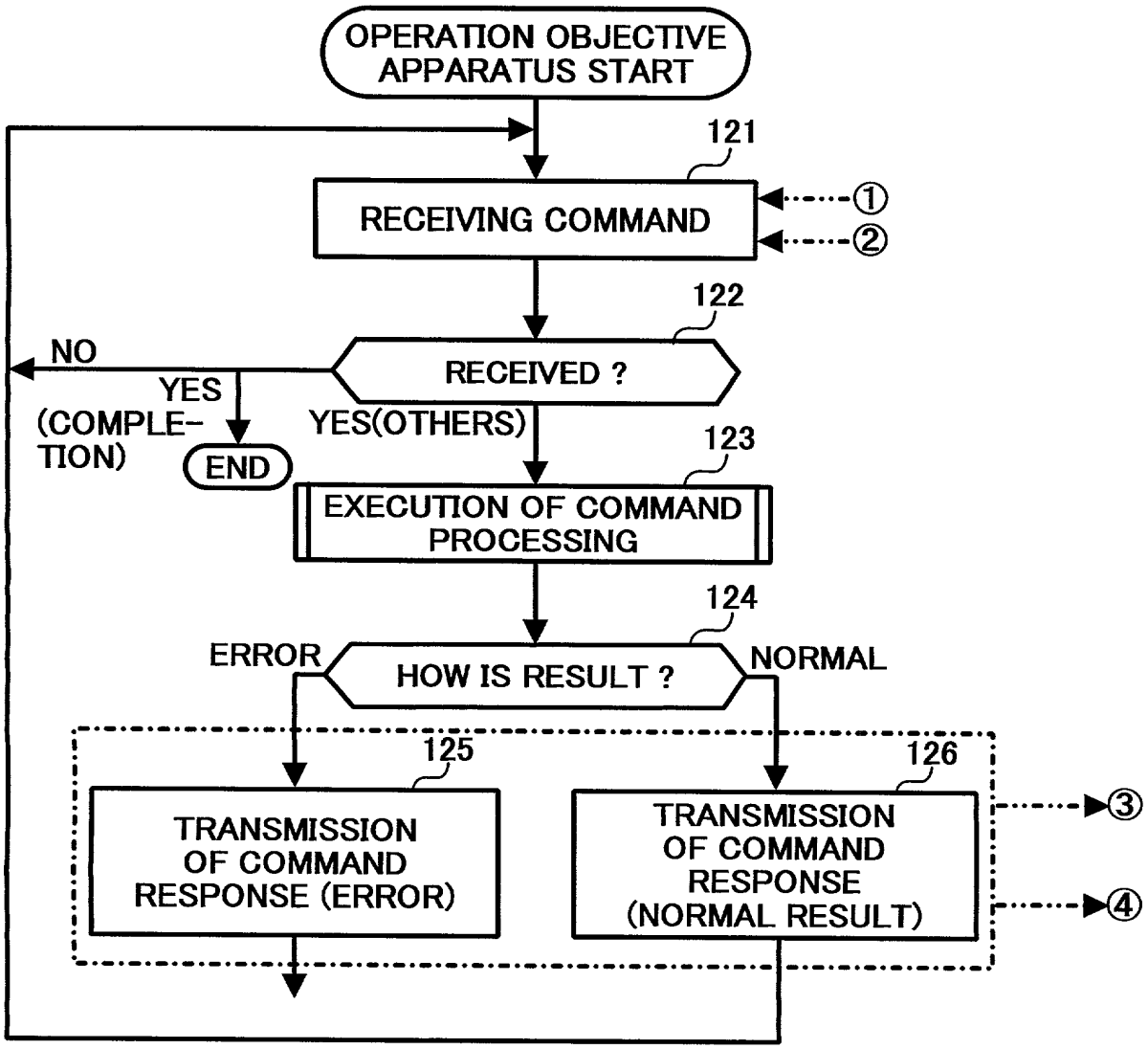

OPERATION OBJECTIVE APPARATUS START
121
RECEIVING COMMAND
①
②
122
NO
RECEIVED ?
YES (COMPLE-TION)
END
YES(OTHERS)
123
EXECUTION OF COMMAND PROCESSING
124
ERROR
HOW IS RESULT ?
NORMAL
125
TRANSMISSION OF COMMAND RESPONSE (ERROR)
126
TRANSMISSION OF COMMAND RESPONSE (NORMAL RESULT)
③
④

FIG. 56B

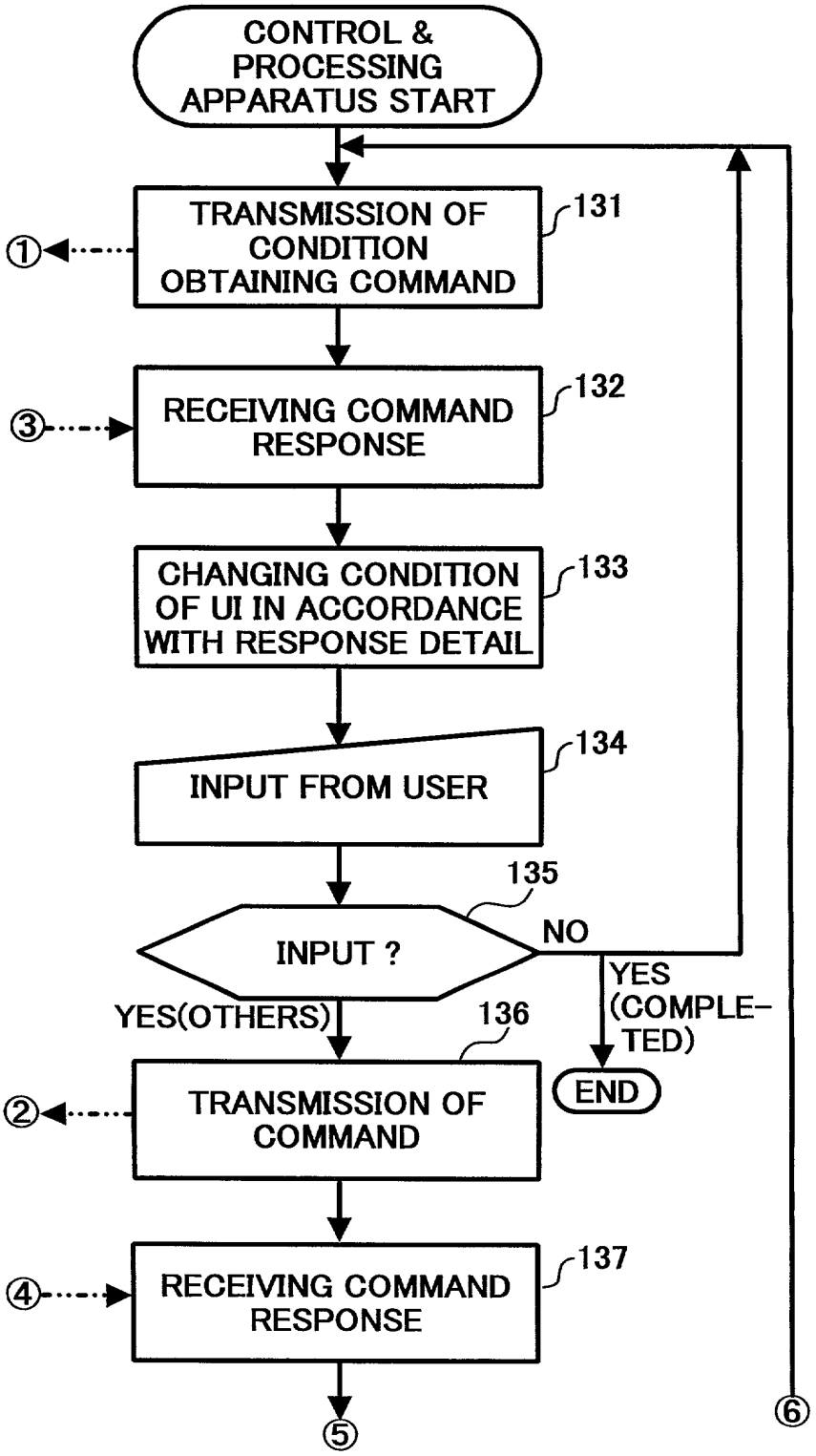

CONTROL & PROCESSING APPARATUS START
TRANSMISSION OF CONDITION OBTAINING COMMAND
131
①
RECEIVING COMMAND RESPONSE
132
③
CHANGING CONDITION OF UI IN ACCORDANCE WITH RESPONSE DETAIL
133
INPUT FROM USER
134
135
INPUT ?
NO
YES (COMPLE-TED)
END
YES(OTHERS)
136
TRANSMISSION OF COMMAND
②
RECEIVING COMMAND RESPONSE
137
④
⑤
⑥

FIG. 56C

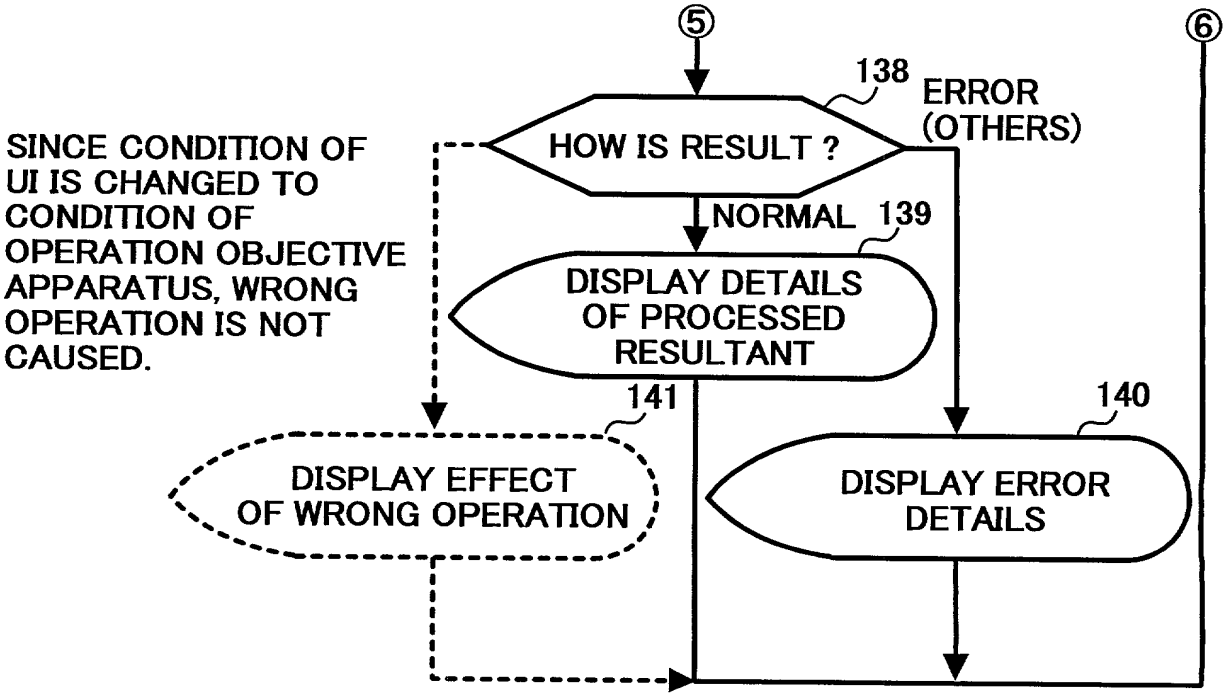

⑤
⑥
138
ERROR
(OTHERS)
HOW IS RESULT ?
NORMAL
139
DISPLAY DETAILS OF PROCESSED RESULTANT
SINCE CONDITION OF UI IS CHANGED TO CONDITION OF OPERATION OBJECTIVE APPARATUS, WRONG OPERATION IS NOT CAUSED.
141
DISPLAY EFFECT OF WRONG OPERATION
140
DISPLAY ERROR DETAILS

FIG. 57A

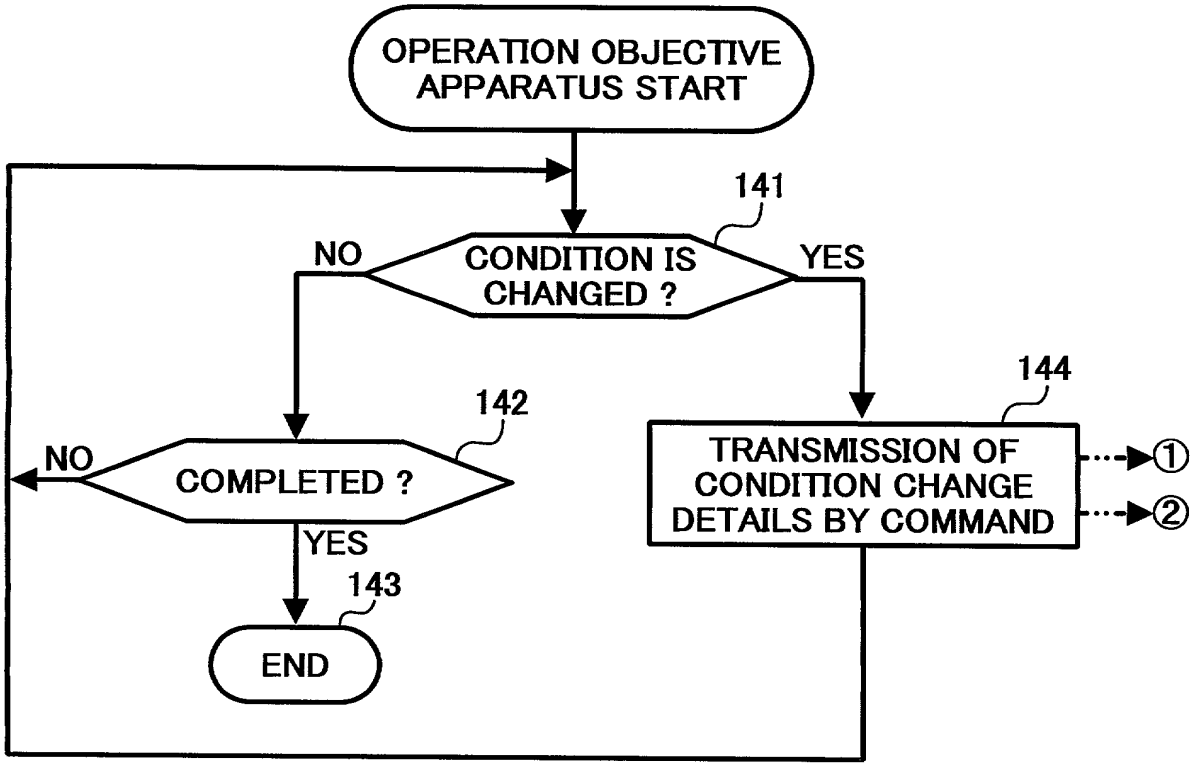

OPERATION OBJECTIVE APPARATUS START
141
NO
CONDITION IS CHANGED ?
YES
144
142
NO
COMPLETED ?
TRANSMISSION OF CONDITION CHANGE DETAILS BY COMMAND
①
②
YES
143
END

FIG. 57B

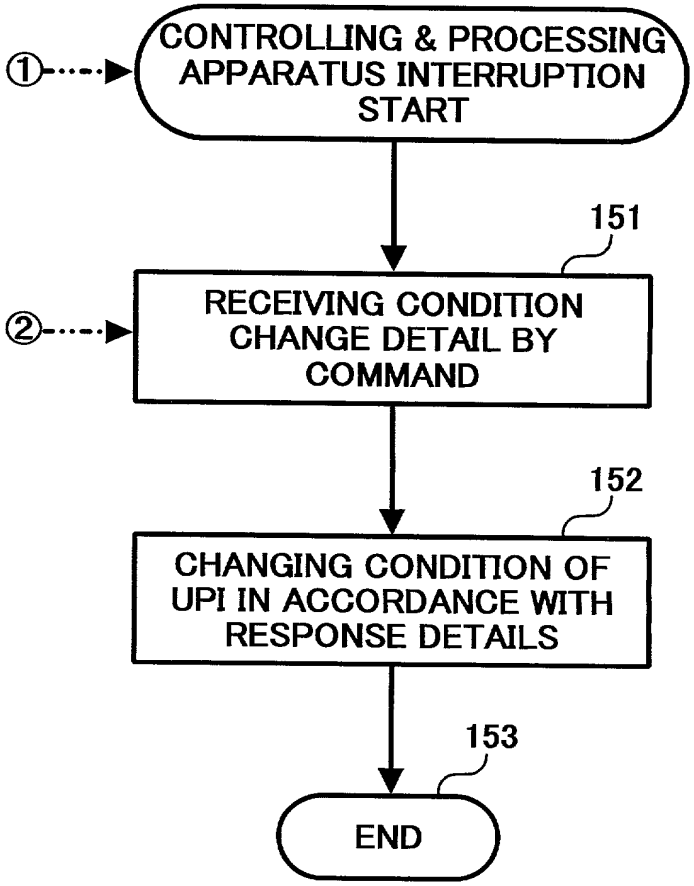

①
CONTROLLING & PROCESSING APPARATUS INTERRUPTION START
151
②
RECEIVING CONDITION CHANGE DETAIL BY COMMAND
152
CHANGING CONDITION OF UPI IN ACCORDANCE WITH RESPONSE DETAILS
153
END

FIG. 57C

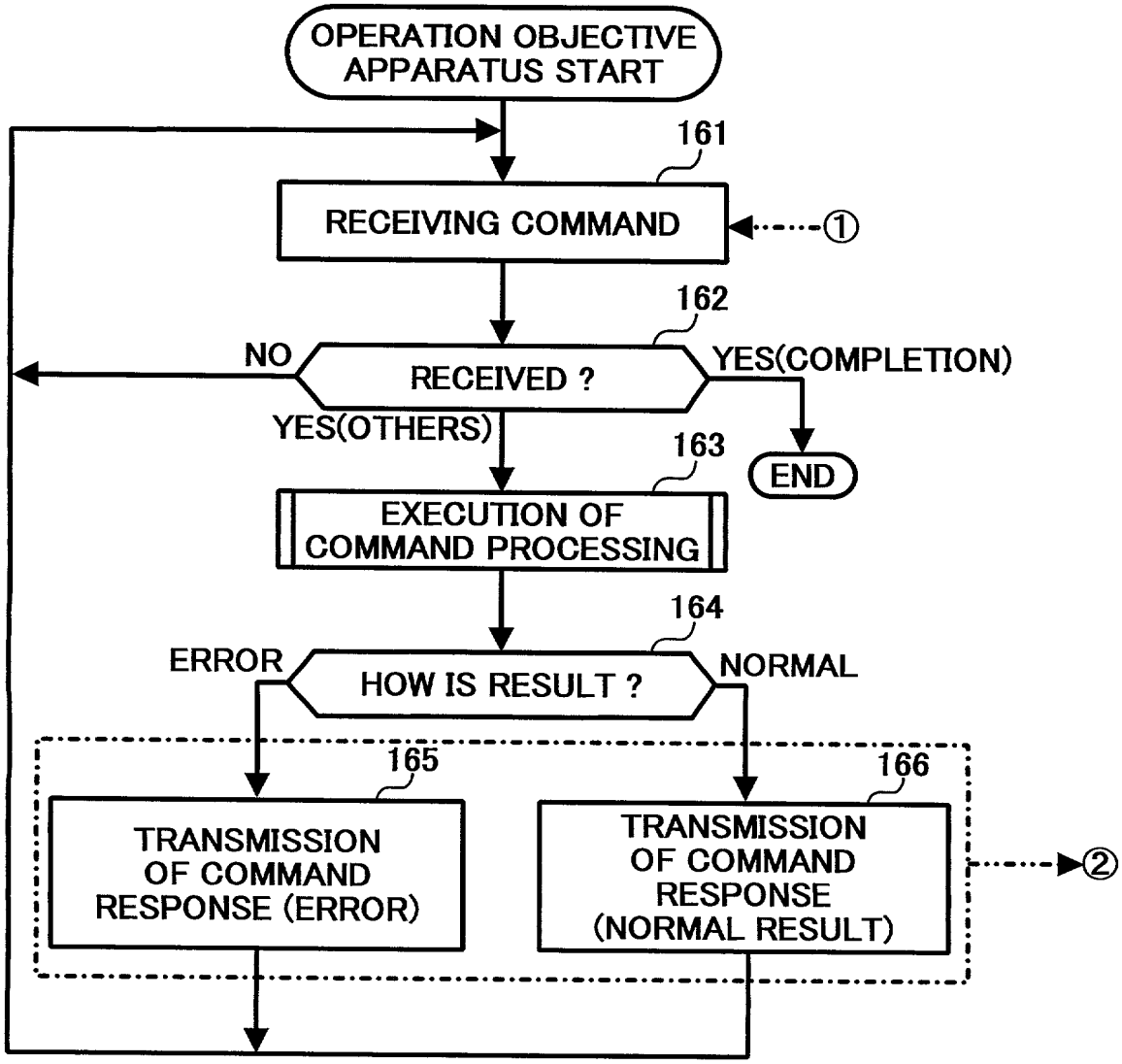

OPERATION OBJECTIVE APPARATUS START
161
RECEIVING COMMAND
①
162
NO
RECEIVED ?
YES(COMPLETION)
YES(OTHERS)
END
163
EXECUTION OF COMMAND PROCESSING
164
ERROR
HOW IS RESULT ?
NORMAL
165
166
TRANSMISSION OF COMMAND RESPONSE (ERROR)
TRANSMISSION OF COMMAND RESPONSE (NORMAL RESULT)
②

FIG. 57D

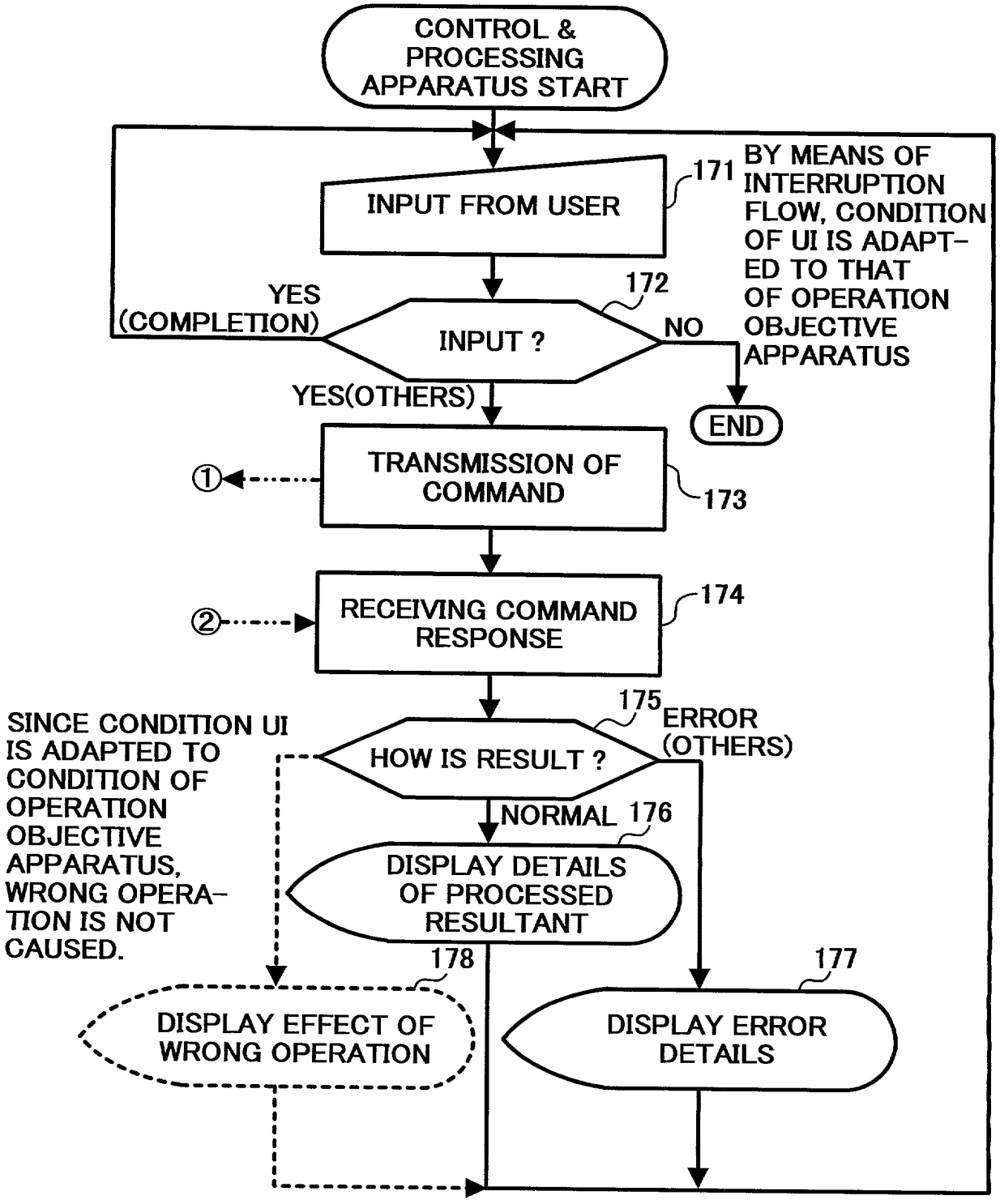

CONTROL & PROCESSING APPARATUS START
INPUT FROM USER
171
BY MEANS OF INTERRUPTION FLOW, CONDITION OF UI IS ADAPTED TO THAT OF OPERATION OBJECTIVE APPARATUS
YES (COMPLETION)
INPUT ?
172
NO
END
YES(OTHERS)
TRANSMISSION OF COMMAND
173
①
RECEIVING COMMAND RESPONSE
174
②
HOW IS RESULT ?
175
ERROR (OTHERS)
NORMAL
176
DISPLAY DETAILS OF PROCESSED RESULTANT
SINCE CONDITION UI IS ADAPTED TO CONDITION OF OPERATION OBJECTIVE APPARATUS, WRONG OPERATION IS NOT CAUSED.
178
DISPLAY EFFECT OF WRONG OPERATION
177
DISPLAY ERROR DETAILS

FIG. 58A

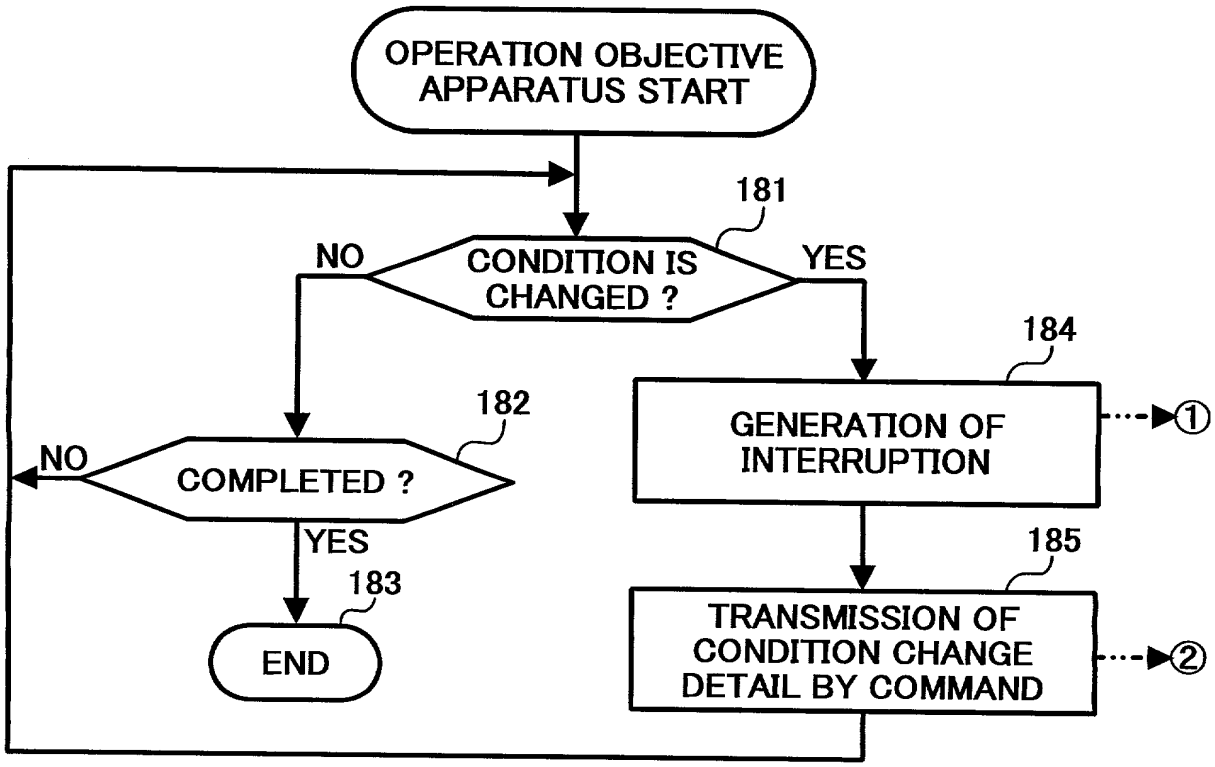

OPERATION OBJECTIVE APPARATUS START
181
CONDITION IS CHANGED ?
NO
YES
184
GENERATION OF INTERRUPTION
①
182
COMPLETED ?
NO
YES
183
END
185
TRANSMISSION OF CONDITION CHANGE DETAIL BY COMMAND
②

FIG. 58B

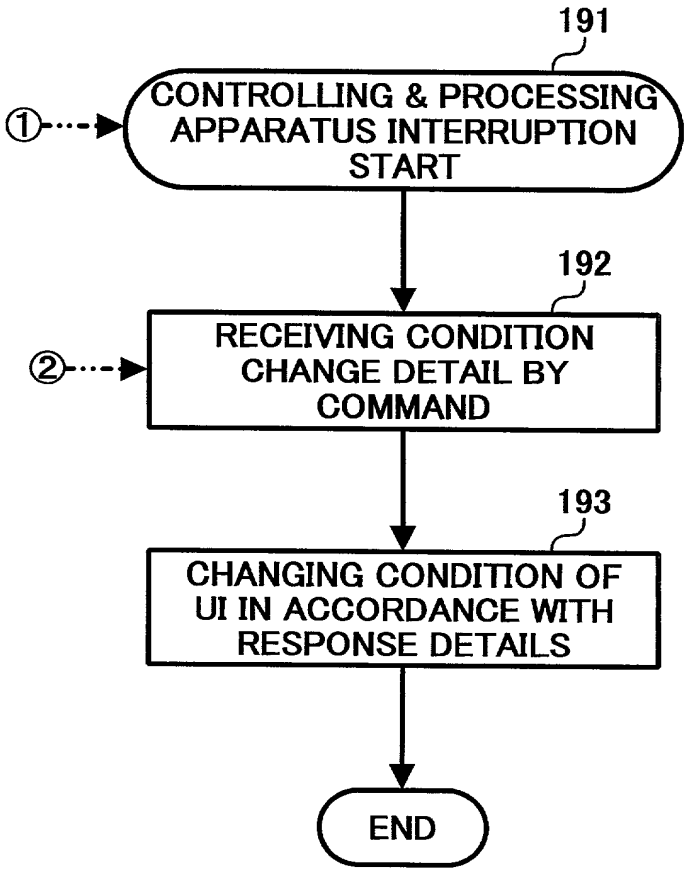

191
CONTROLLING & PROCESSING APPARATUS INTERRUPTION START
①
192
RECEIVING CONDITION CHANGE DETAIL BY COMMAND
②
193
CHANGING CONDITION OF UI IN ACCORDANCE WITH RESPONSE DETAILS
END

FIG. 58C

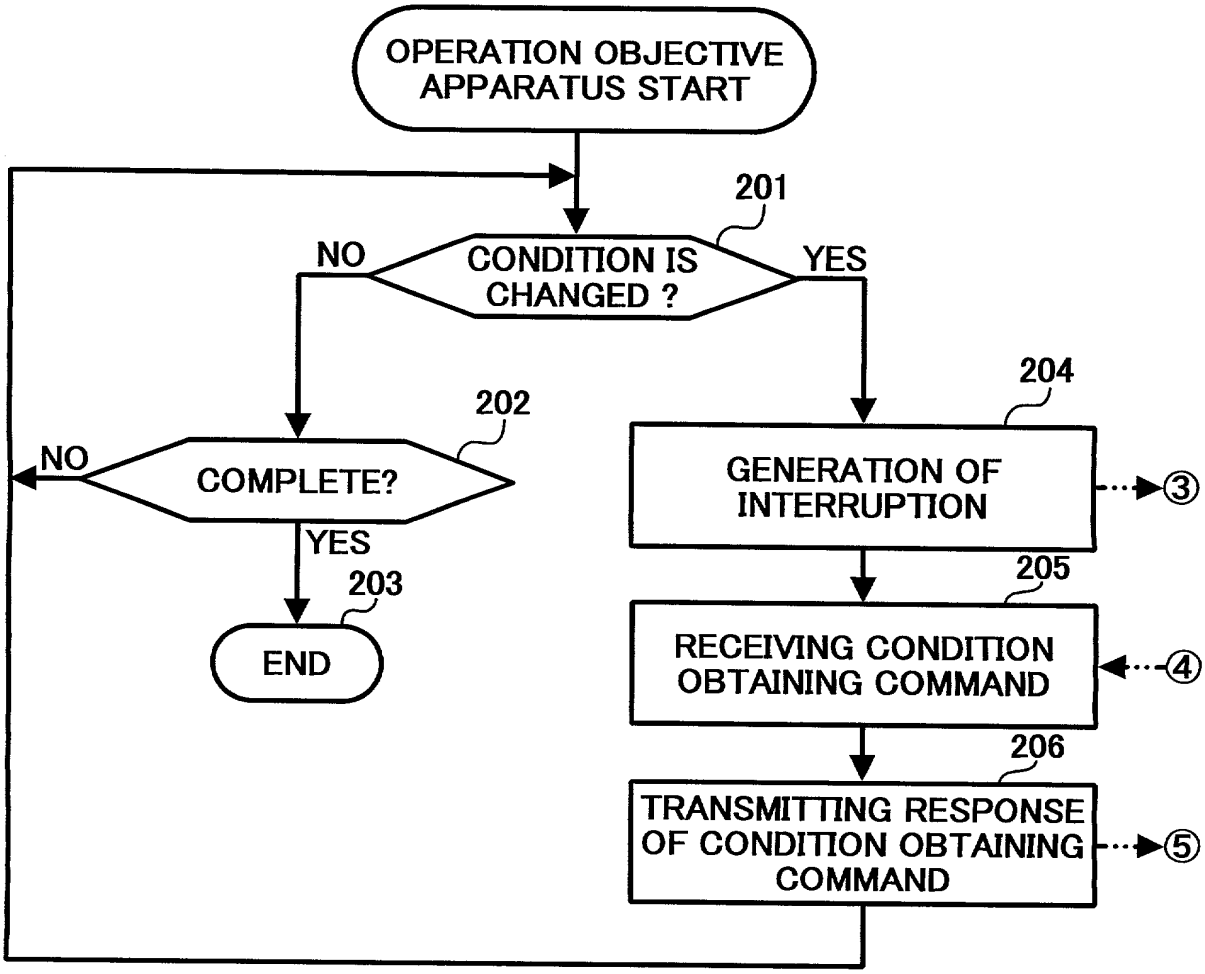

OPERATION OBJECTIVE APPARATUS START
201
CONDITION IS CHANGED ?
NO
YES
202
COMPLETE?
NO
YES
203
END
204
GENERATION OF INTERRUPTION
③
205
RECEIVING CONDITION OBTAINING COMMAND
④
206
TRANSMITTING RESPONSE OF CONDITION OBTAINING COMMAND
⑤

FIG. 58D

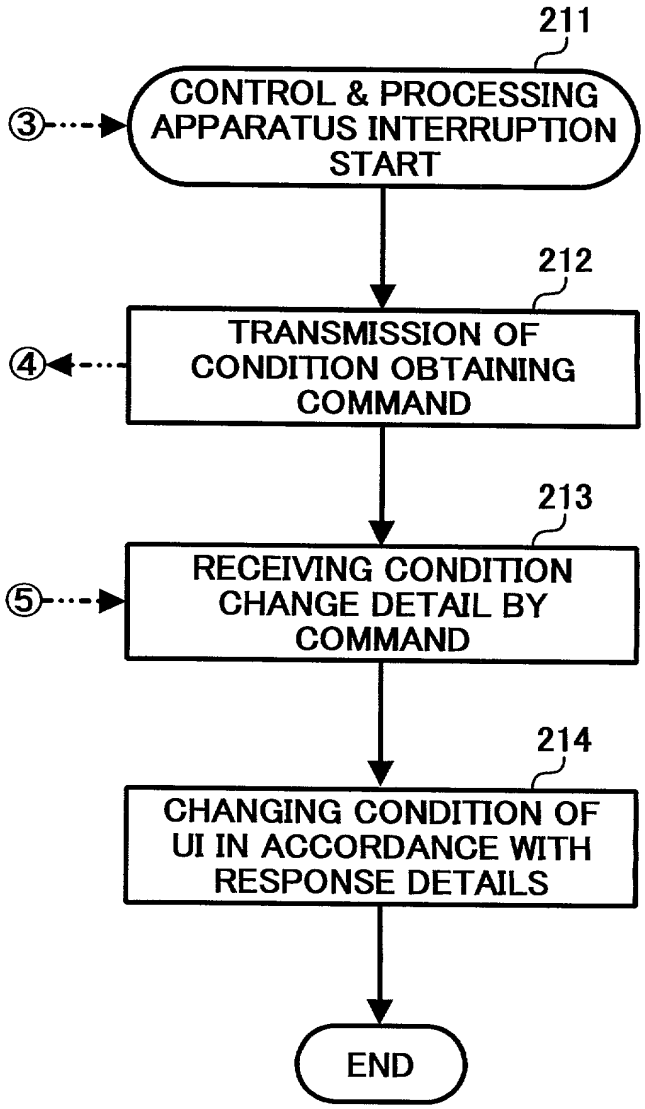

211
CONTROL & PROCESSING APPARATUS INTERRUPTION START
③
212
TRANSMISSION OF CONDITION OBTAINING COMMAND
④
213
RECEIVING CONDITION CHANGE DETAIL BY COMMAND
⑤
214
CHANGING CONDITION OF UI IN ACCORDANCE WITH RESPONSE DETAILS
END

FIG. 59A

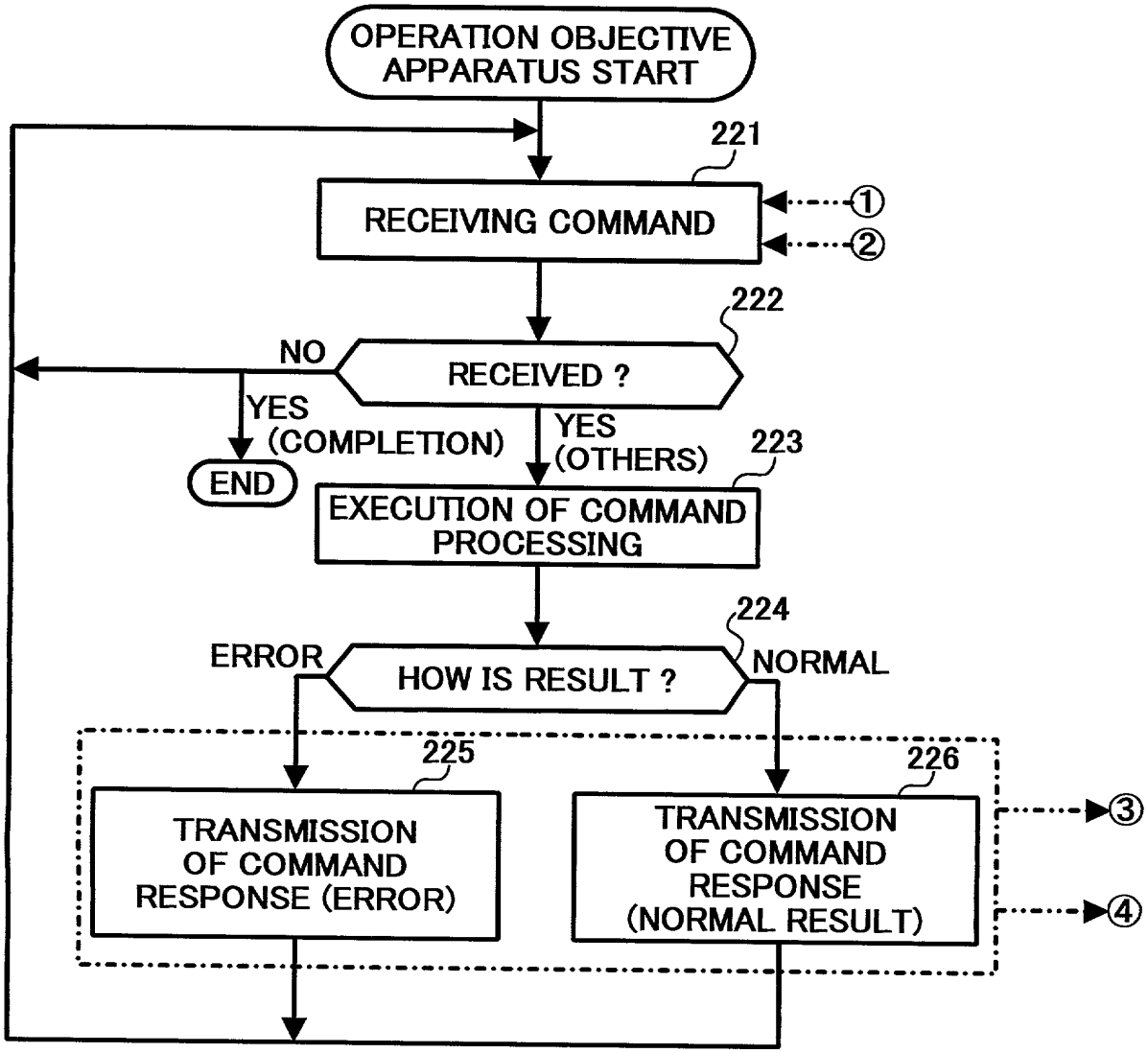

OPERATION OBJECTIVE APPARATUS START
221
RECEIVING COMMAND
①
②
222
NO
RECEIVED ?
YES (COMPLETION)
END
YES (OTHERS)
223
EXECUTION OF COMMAND PROCESSING
224
ERROR
HOW IS RESULT ?
NORMAL
225
TRANSMISSION OF COMMAND RESPONSE (ERROR)
226
TRANSMISSION OF COMMAND RESPONSE (NORMAL RESULT)
③
④

FIG. 59B

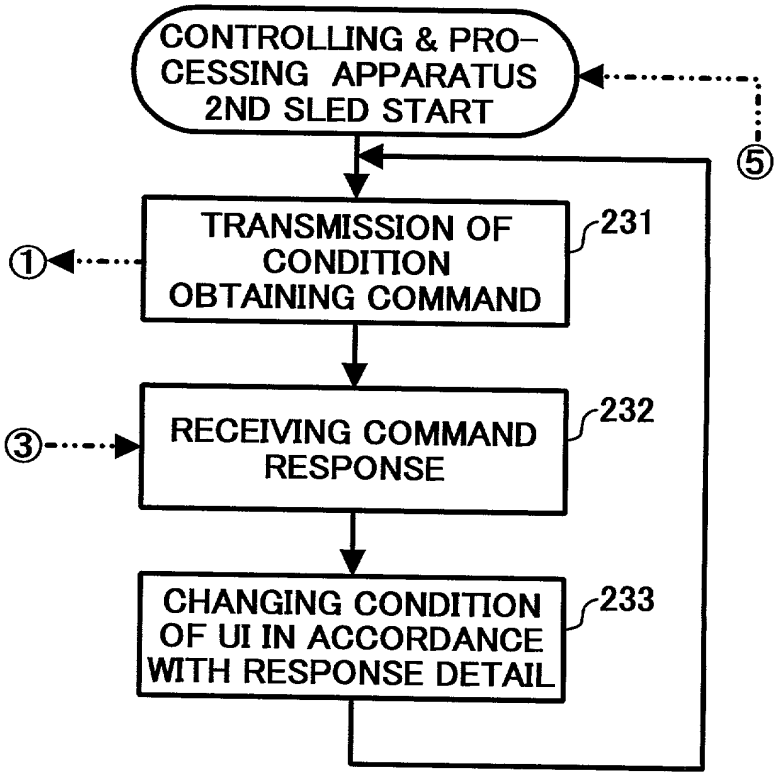

CONTROLLING & PROCESSING APPARATUS 2ND SLED START
⑤
TRANSMISSION OF CONDITION OBTAINING COMMAND
231
①
RECEIVING COMMAND RESPONSE
232
③
CHANGING CONDITION OF UI IN ACCORDANCE WITH RESPONSE DETAIL
233

FIG. 59C

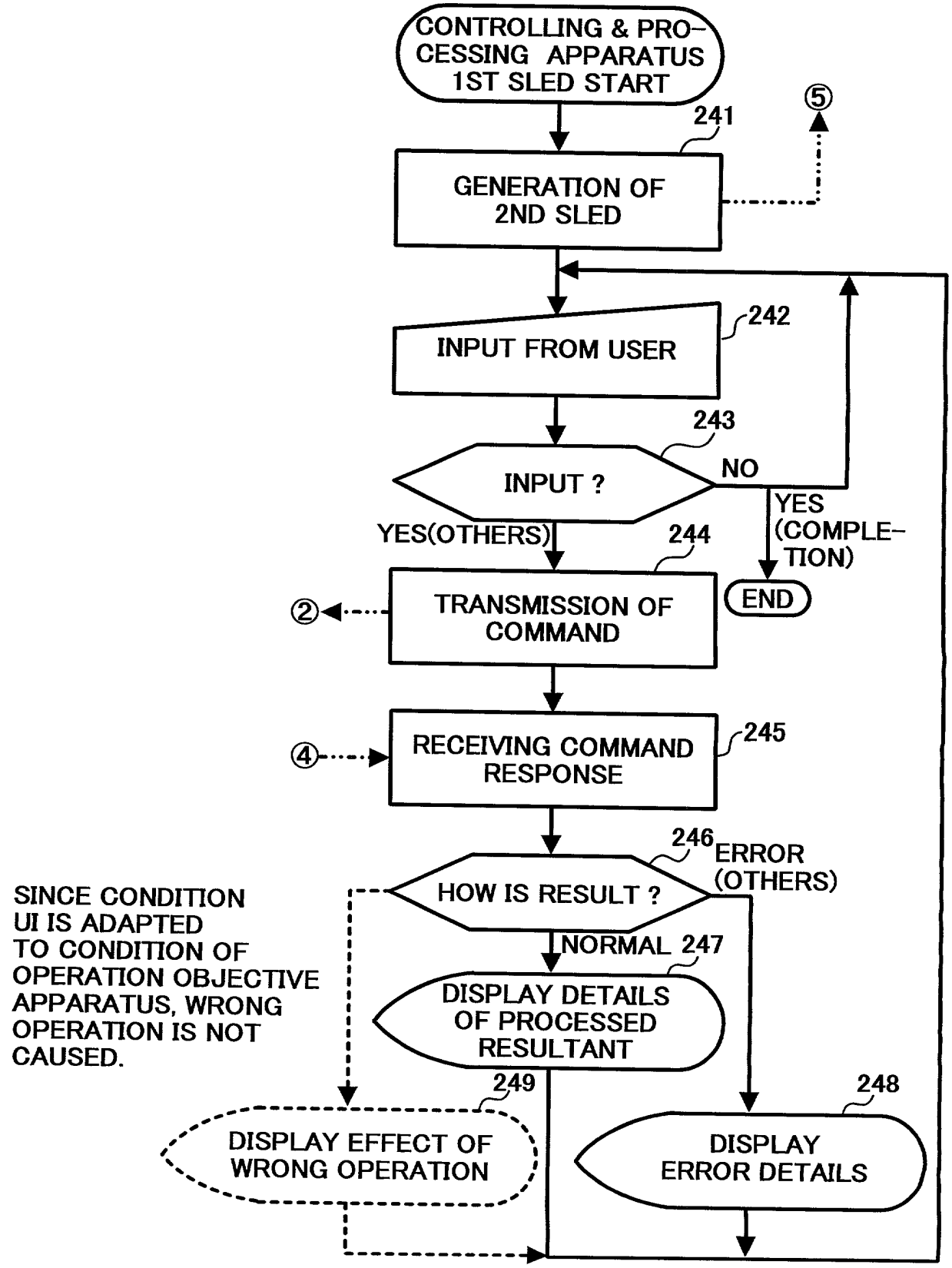

CONTROLLING & PROCESSING APPARATUS 1ST SLED START
241
GENERATION OF 2ND SLED
⑤
242
INPUT FROM USER
243
INPUT ?
NO
YES (COMPLETION)
END
YES(OTHERS)
244
TRANSMISSION OF COMMAND
②
④
RECEIVING COMMAND RESPONSE
245
246
HOW IS RESULT ?
ERROR (OTHERS)
NORMAL
247
DISPLAY DETAILS OF PROCESSED RESULTANT
SINCE CONDITION UI IS ADAPTED TO CONDITION OF OPERATION OBJECTIVE APPARATUS, WRONG OPERATION IS NOT CAUSED.
249
DISPLAY EFFECT OF WRONG OPERATION
248
DISPLAY ERROR DETAILS

FIG. 60A

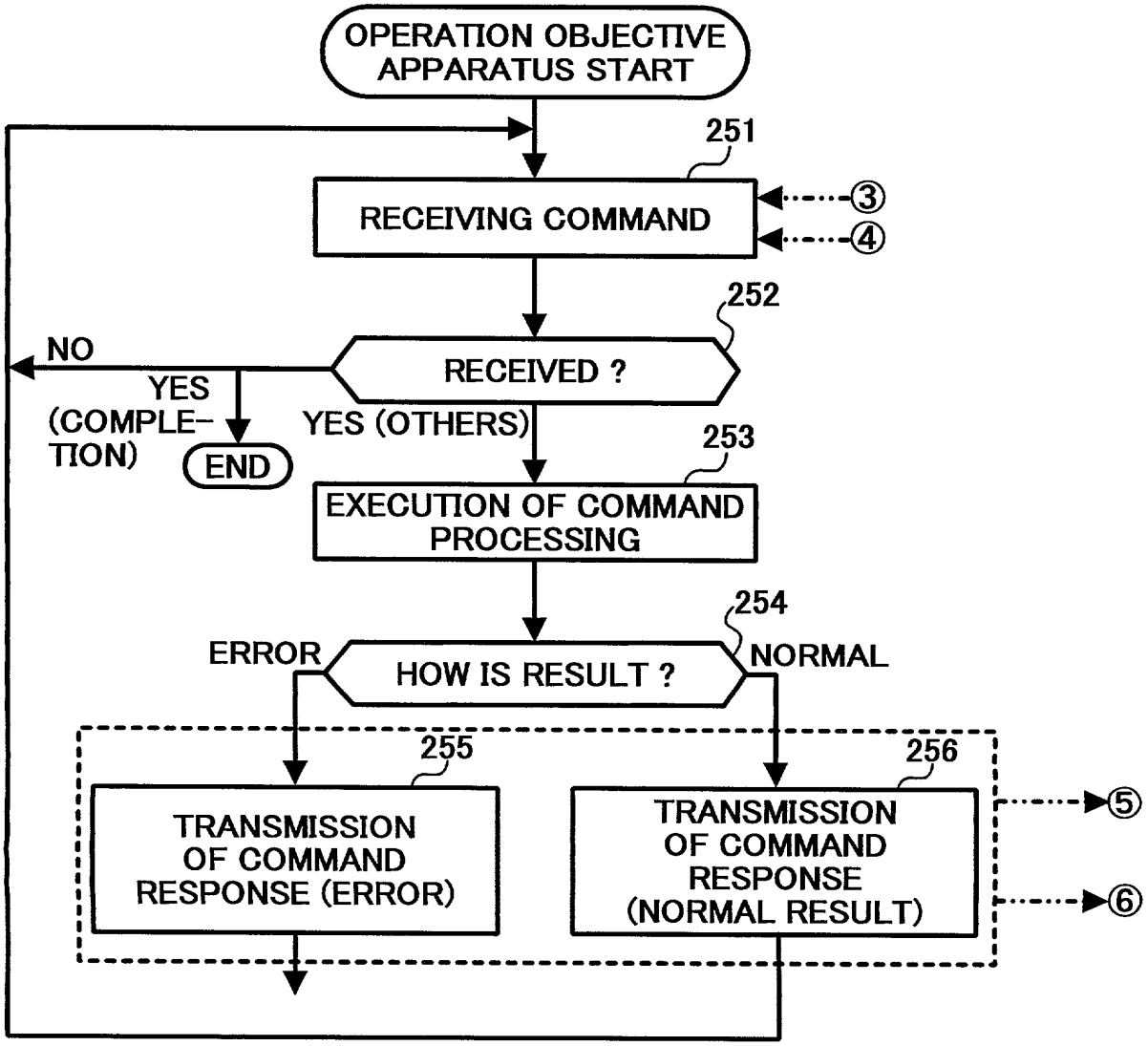

OPERATION OBJECTIVE APPARATUS START
251
RECEIVING COMMAND
③
④
252
NO
RECEIVED ?
YES (COMPLE-TION)
END
YES (OTHERS)
253
EXECUTION OF COMMAND PROCESSING
254
ERROR
HOW IS RESULT ?
NORMAL
255
256
TRANSMISSION OF COMMAND RESPONSE (ERROR)
TRANSMISSION OF COMMAND RESPONSE (NORMAL RESULT)
⑤
⑥

FIG. 60B

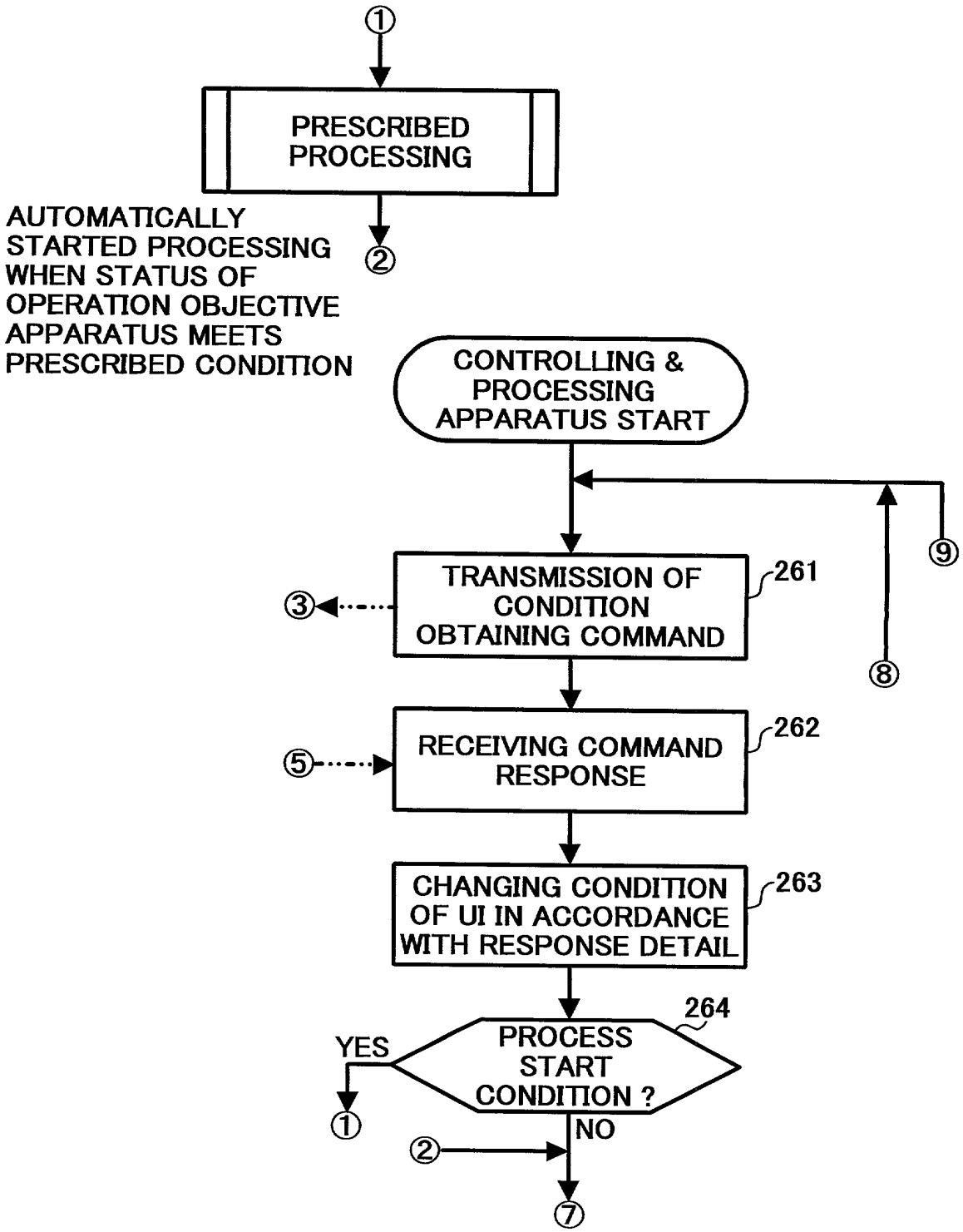

①
PRESCRIBED PROCESSING
AUTOMATICALLY STARTED PROCESSING WHEN STATUS OF OPERATION OBJECTIVE APPARATUS MEETS PRESCRIBED CONDITION
②
CONTROLLING & PROCESSING APPARATUS START
TRANSMISSION OF CONDITION OBTAINING COMMAND
261
③
⑧
⑨
RECEIVING COMMAND RESPONSE
262
⑤
CHANGING CONDITION OF UI IN ACCORDANCE WITH RESPONSE DETAIL
263
264
PROCESS START CONDITION ?
YES
NO
①
②
⑦

FIG. 60C

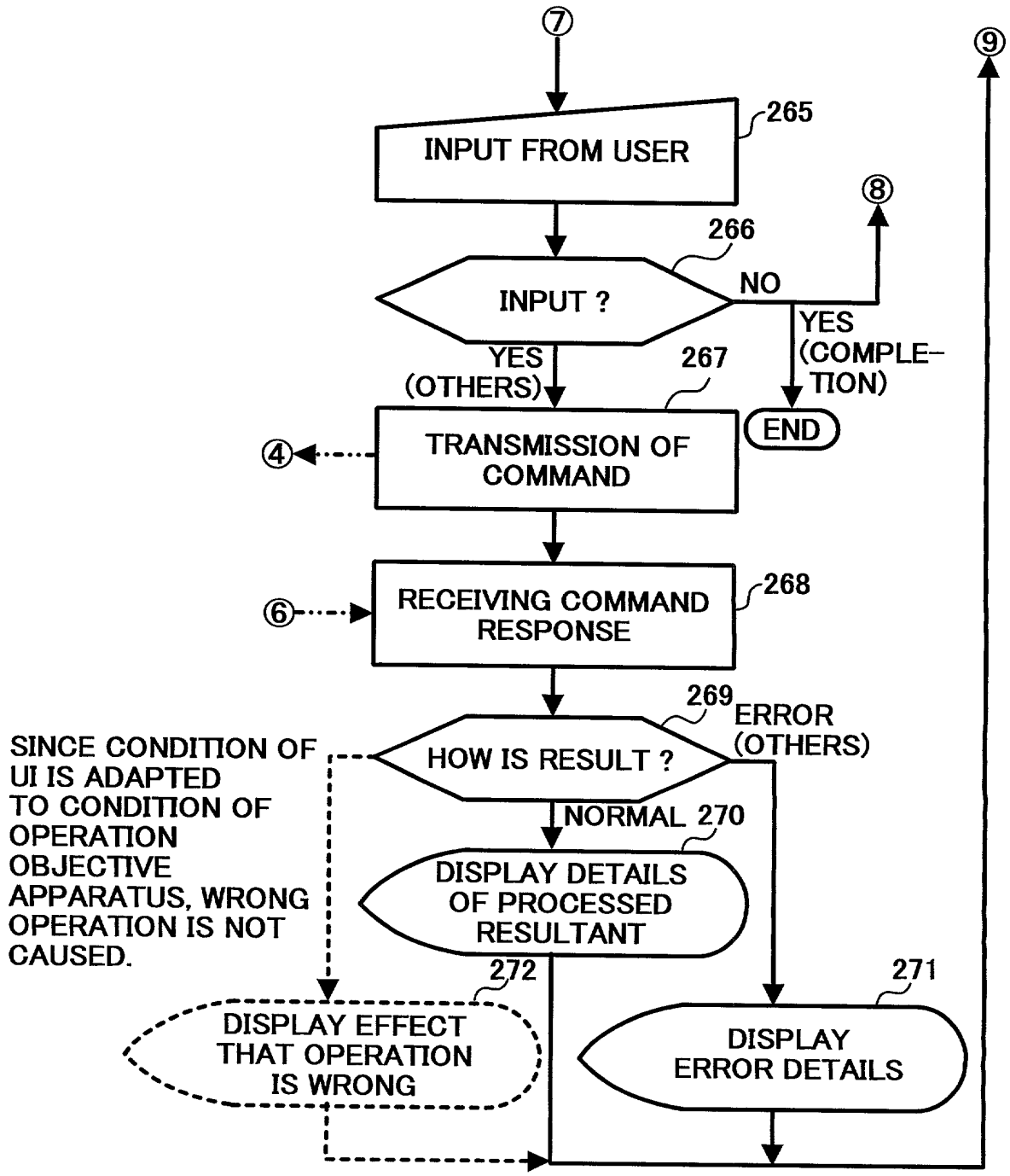

⑦
⑨
INPUT FROM USER
265
⑧
266
INPUT ?
NO
YES (COMPLE-TION)
YES (OTHERS)
267
END
④
TRANSMISSION OF COMMAND
⑥
RECEIVING COMMAND RESPONSE
268
269
ERROR (OTHERS)
HOW IS RESULT ?
NORMAL 270
SINCE CONDITION OF UI IS ADAPTED TO CONDITION OF OPERATION OBJECTIVE APPARATUS, WRONG OPERATION IS NOT CAUSED.
DISPLAY DETAILS OF PROCESSED RESULTANT
272
271
DISPLAY EFFECT THAT OPERATION IS WRONG
DISPLAY ERROR DETAILS

FIG. 61A

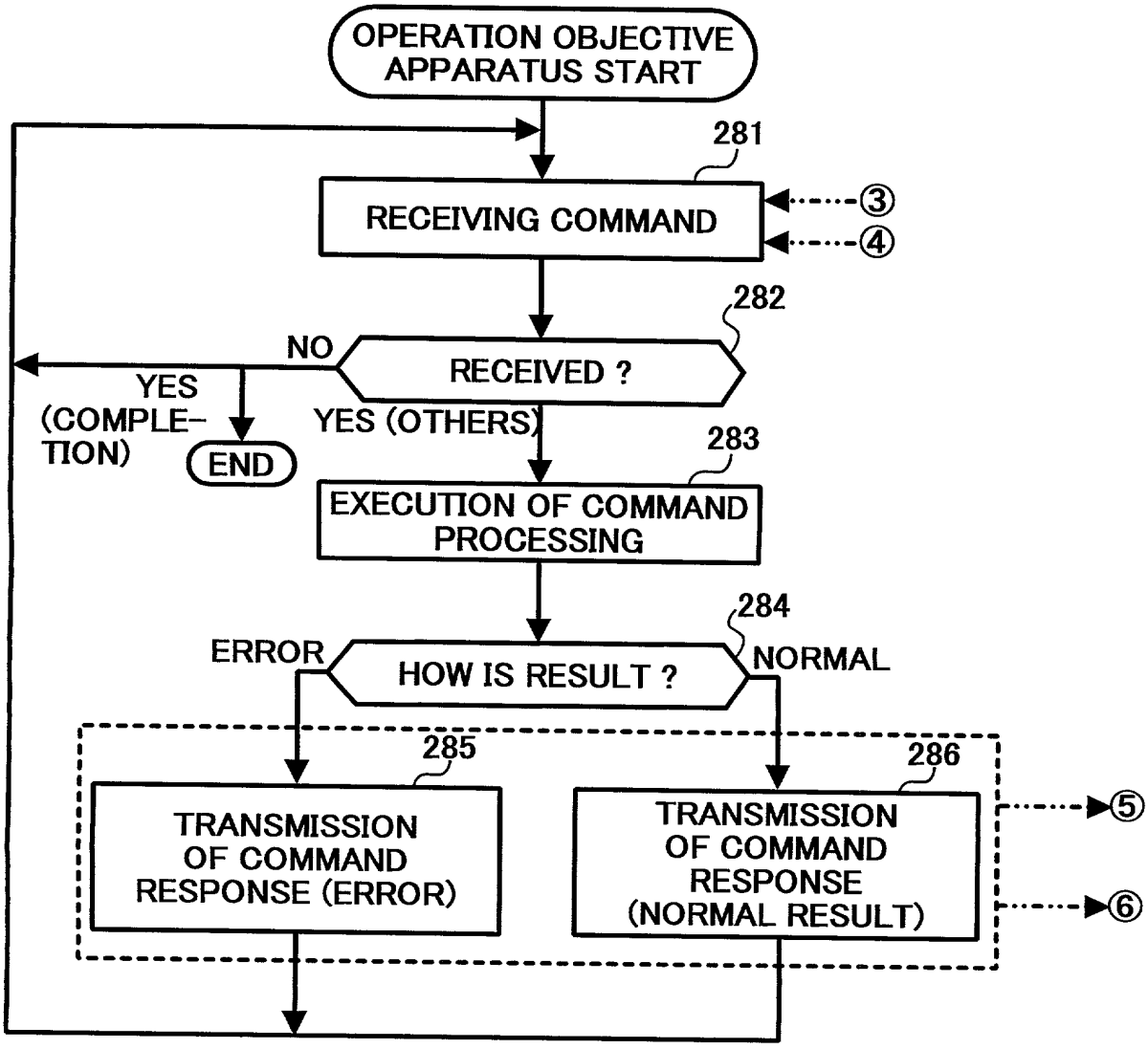

OPERATION OBJECTIVE APPARATUS START
281
RECEIVING COMMAND
③
④
282
NO
RECEIVED ?
YES (COMPLE-TION)
END
YES (OTHERS)
283
EXECUTION OF COMMAND PROCESSING
284
ERROR
HOW IS RESULT ?
NORMAL
285
TRANSMISSION OF COMMAND RESPONSE (ERROR)
286
TRANSMISSION OF COMMAND RESPONSE (NORMAL RESULT)
⑤
⑥

FIG. 61B

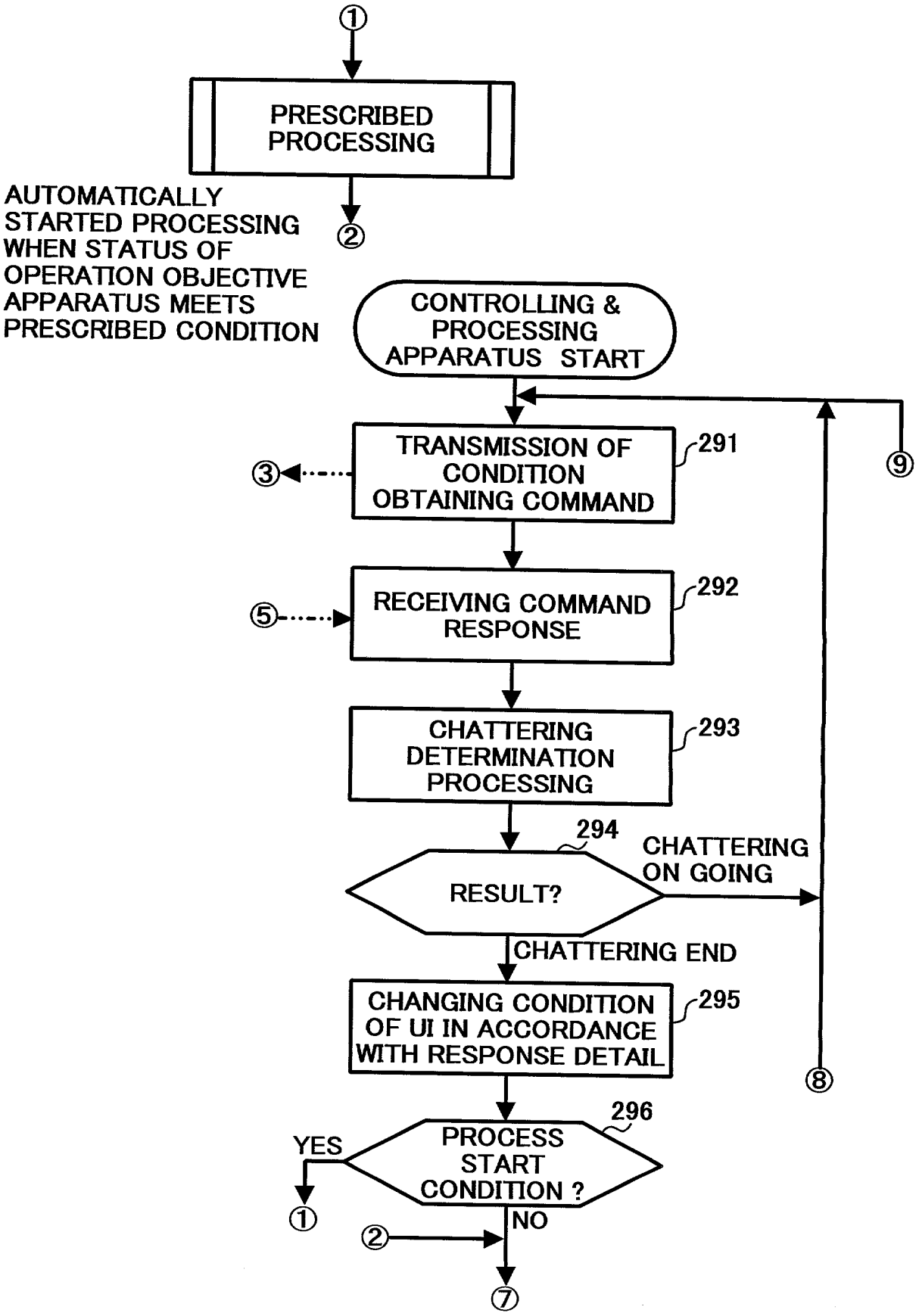

①
PRESCRIBED PROCESSING
AUTOMATICALLY STARTED PROCESSING WHEN STATUS OF OPERATION OBJECTIVE APPARATUS MEETS PRESCRIBED CONDITION
②
CONTROLLING & PROCESSING APPARATUS START
③
TRANSMISSION OF CONDITION OBTAINING COMMAND
291
⑤
RECEIVING COMMAND RESPONSE
292
CHATTERING DETERMINATION PROCESSING
293
294
RESULT?
CHATTERING ON GOING
CHATTERING END
CHANGING CONDITION OF UI IN ACCORDANCE WITH RESPONSE DETAIL
295
⑧
⑨
296
PROCESS START CONDITION ?
YES
①
NO
②
⑦

FIG. 61C

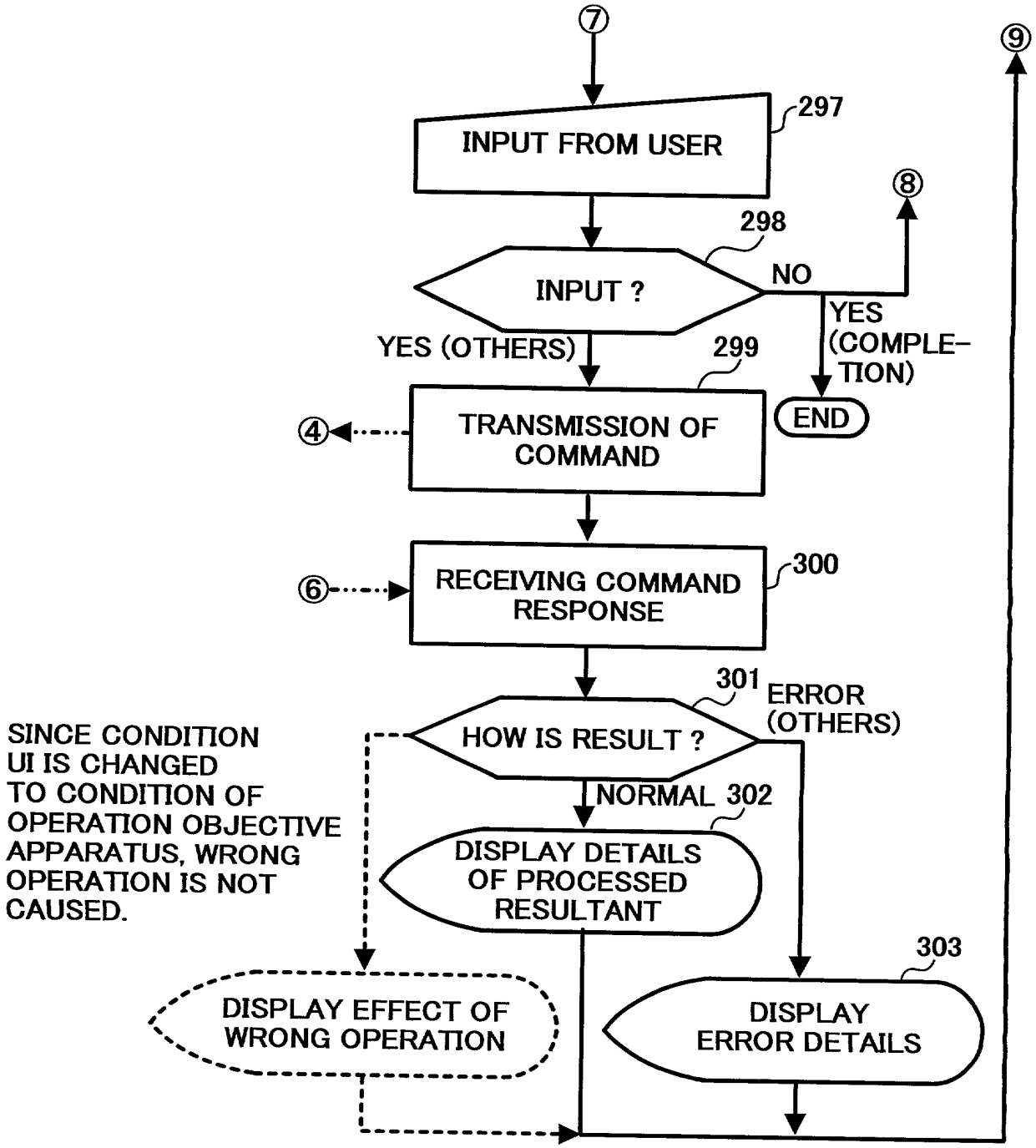

⑦
INPUT FROM USER
297
⑨
⑧
298
INPUT ?
NO
YES (COMPLE-TION)
YES (OTHERS)
299
END
④
TRANSMISSION OF COMMAND
⑥
RECEIVING COMMAND RESPONSE
300
301
ERROR (OTHERS)
HOW IS RESULT ?
NORMAL 302
SINCE CONDITION UI IS CHANGED TO CONDITION OF OPERATION OBJECTIVE APPARATUS, WRONG OPERATION IS NOT CAUSED.
DISPLAY DETAILS OF PROCESSED RESULTANT
303
DISPLAY EFFECT OF WRONG OPERATION
DISPLAY ERROR DETAILS

FIG. 62A

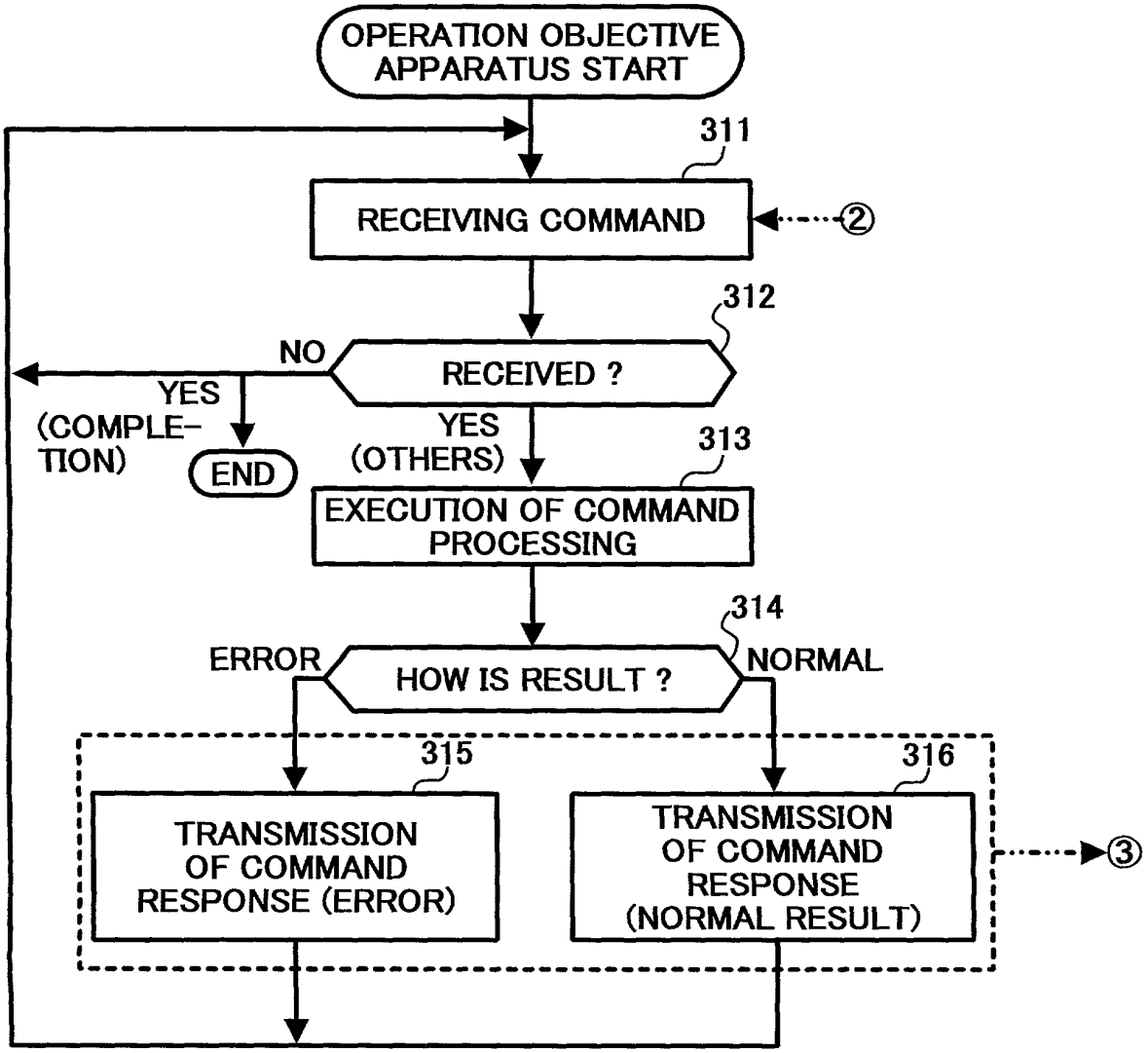

OPERATION OBJECTIVE APPARATUS START
311
RECEIVING COMMAND
②
312
NO
RECEIVED ?
YES (COMPLE-TION)
END
YES (OTHERS)
313
EXECUTION OF COMMAND PROCESSING
314
ERROR
HOW IS RESULT ?
NORMAL
315
316
TRANSMISSION OF COMMAND RESPONSE (ERROR)
TRANSMISSION OF COMMAND RESPONSE (NORMAL RESULT)
③

FIG. 62B

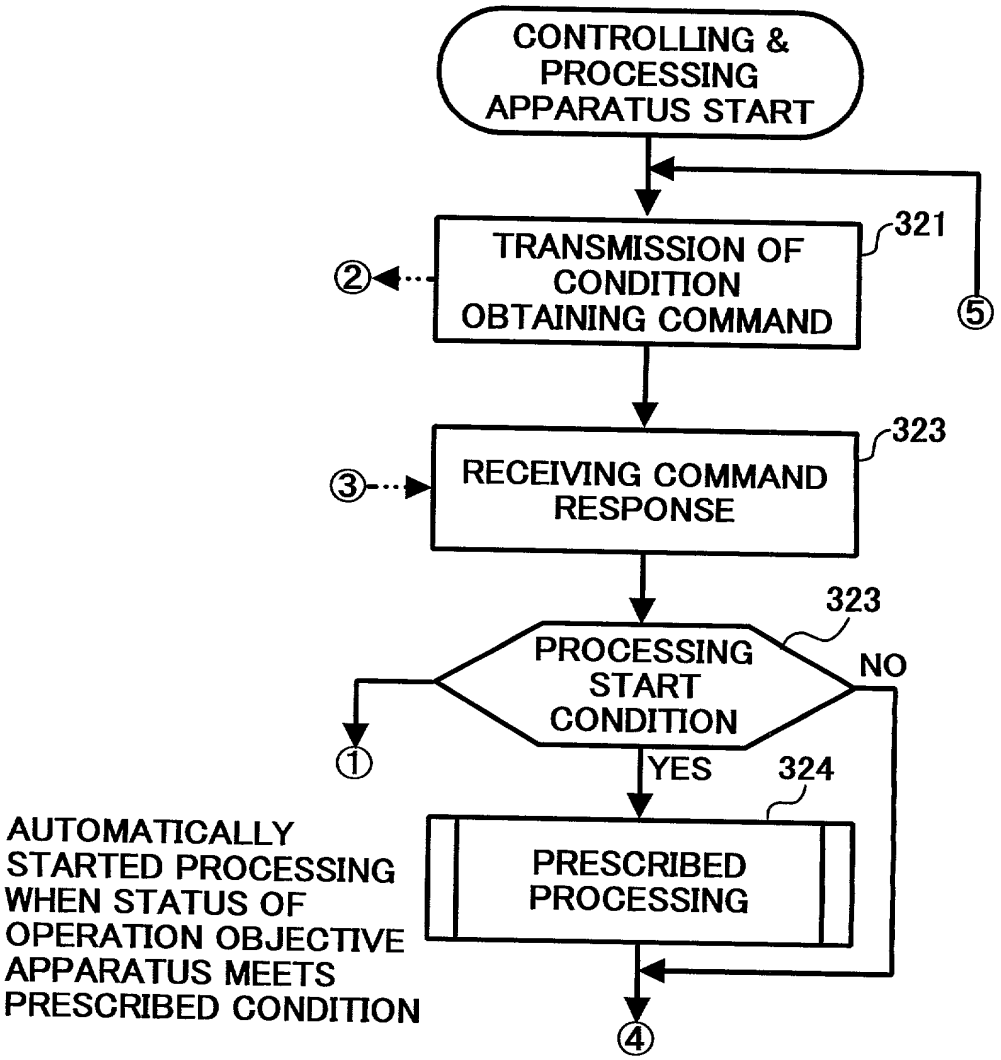
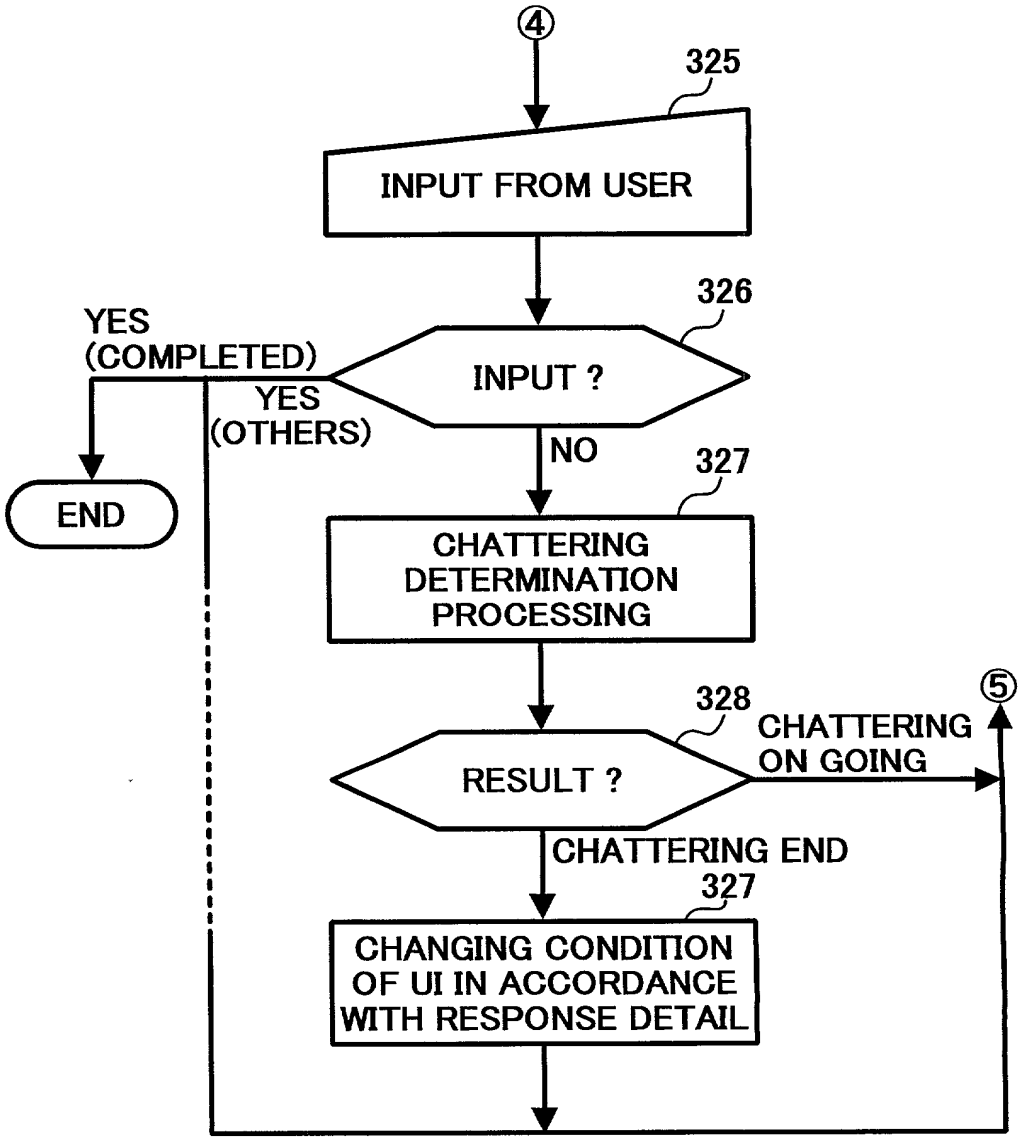

CONTROLLING & PROCESSING APPARATUS START
TRANSMISSION OF CONDITION OBTAINING COMMAND
321
②
⑤
RECEIVING COMMAND RESPONSE
323
③
PROCESSING START CONDITION
323
NO
①
YES
324
PRESCRIBED PROCESSING
④
AUTOMATICALLY STARTED PROCESSING WHEN STATUS OF OPERATION OBJECTIVE APPARATUS MEETS PRESCRIBED CONDITION

FIG. 62C


④
325
INPUT FROM USER
326
YES
(COMPLETED)
INPUT ?
YES
(OTHERS)
NO
END
327
CHATTERING
DETERMINATION
PROCESSING
328
CHATTERING
ON GOING
⑤
RESULT ?
CHATTERING END
327
CHANGING CONDITION
OF UI IN ACCORDANCE
WITH RESPONSE DETAIL